TITLE 327 WATER POLLUTION CONTROL BOARD

LSA Document #08-764

SUMMARY/RESPONSE TO COMMENTS FROM THE THIRD COMMENT PERIOD

The Indiana Department of Environmental Management (IDEM) requested public comment from December 7, 2011, through December 30, 2011, on IDEM's proposed rule language. IDEM received comments from the following parties:

Alcoa, Warrick Operations (AWO)

Andes, Fredric, Esquire, Partner, Barnes & Thornburg (FA)

Barnes & Thornburg LLP on behalf of Indianapolis Power and Light Company (IPL)

Citizens Energy Group (CEG)

Conservation Law Center and Alliance for the Great Lakes (CLC-AGL)

Environmental Coalition, consisting of the Conservation Law Center, Alliance for the Great Lakes, Environmental Law and Policy Center, Hoosier Environmental Council, Save the Dunes, Sierra Club Hoosier Chapter, Porter County Chapter of the Izaak Walton League of America, and the Indiana Division of the Izaak Walton League of America (EC)

Indiana Chamber of Commerce (IChC)

Indiana Coal Council, Inc. (ICC)

Indiana Energy Association on behalf of the Indiana Utility Group (IUG)

Indiana Environmental Institute, Inc. (IEI)

Indiana Pork Advocacy Coalition/Indiana Farm Bureau (IP-FB)

Indiana Steel Environmental Group, consisting of ArcelorMittal USA, ArcelorMittal Indiana Harbor Inc., U.S. Steel Gary Works, U.S. Steel Midwest Plant, U.S. Steel East Chicago Tin Operations, I/N Tek, I/N Kote, ArcelorMittal Burns Harbor LLC, and Nucor Steel Crawfordsville (ISEG)

Indiana Water Quality Coalition and the Indiana Manufacturers Association (IWQC-IMA)

NIPSCO, A NiSource Company (NiS)

Northwest Indiana Forum (NIF)

Following is a summary of the comments received and IDEM's responses thereto:

General Comments

Comment: It is critical that the Water Pollution Control Board (WPCB) avoid further delay in the adoption of the antidegradation rules. Indiana's rivers, streams, and lakes have endured years of unnecessary degradation and will continue to do so until the state adopts and begins implementing the antidegradation implementation procedures required by federal law. IDEM incorporated into the proposed (preliminarily adopted) rule several substantive and structural revisions that improve the overall readability and substance of the draft rule in several respects. There are still some remaining concerns with the proposed rule, but we are confident they can be addressed by statements or clarifications included in IDEM's response to comments, U.S. EPA's approval document, or in separate guidance. (EC)

Response: IDEM agrees and is committed to timely bringing the antidegradation standards and implementation procedures rule to the WPCB for final adoption.

Comment: The antidegradation proposed rule contains a number of revisions to the current Indiana water quality standards rules that Alcoa believes will significantly and adversely affect Alcoa's three facilities within Indiana. This regulation is just another obstacle against the ability to remain globally competitive. Alcoa is very concerned with the proposed rule as written because the proposed rule will: (1) impose unnecessary and unreasonable burdens and restraints

on Alcoa's facilities when making even minor modifications to our operations; (2) decrease operational flexibility; (3) impose significant additional administrative expense and burden in processing more frequent NPDES permit modifications; (4) impose ultimate prohibitions on new and increased discharges; and (5) result in unnecessarily more stringent permit effluent limits. (AWO)

Response: IDEM worked with stakeholders, including industry representatives to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA. IDEM believes the proposed rule achieves the goal of preserving Indiana's water quality and will impose new requirements that may prohibit some discharges or, in some cases, result in more stringent effluent limits. IDEM does not believe these requirements impose unnecessary or unreasonable restraints; decrease operational flexibility; or impose significant additional expense or burden. IDEM believes it is appropriate for those proposing new or increased discharges justify that degrading discharges are necessary and accommodate important social or economic benefit. IDEM believes that those proposing new or increased discharges have readily available much of the information needed to develop an antidegradation demonstration.

Comment: The Indiana Pork Advocacy Coalition and Indiana Farm Bureau have commented on rule concerns in the past, and IDEM's responses to several of these concerns have indicated that IDEM's interpretation of the proposed rule aligns with our understanding of how antidegradation standards should be implemented according to the Clean Water Act (CWA). However, the understanding of IDEM's interpretation is based on IDEM's responses to comments not on the text of the actual rule. The regulated community must be able to rely on the actual text of the rule as that will remain constant while interpretations of an unclear rule could vary over time. Further, the likelihood of ongoing litigation created by unclear rule language is even more concerning than the threat of varying interpretations in the future. Overall, we are pleased that some changes have been made to this proposed rule. Nonetheless, we remain concerned that the rule is largely unworkable as written. While relatively few agricultural activities are subject to this rule, those that are should have little concern with not being able to show that they will have little or no impact on water quality. That does not change that it will likely be confusing and difficult to make the required showings under this rule. (IP-FB)

Response: The proposed rule clearly states that it applies to activities subject to the CWA: "The antidegradation implementation procedures established in sections 4 through 7 of this rule apply to a proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity subject to the Clean Water Act, including a change in process or operation that will result in a significant lowering of water quality." Many agricultural activities are exempt from the CWA and are, therefore, exempt from the antidegradation standards and implementation procedures rule. IDEM believes that the rule is understandable and workable and that those proposing new or increased loadings have readily available much of the information needed to develop an antidegradation demonstration.

Comment: The antidegradation proposed rule needs to provide permitting certainty so that new, expanding, and existing permitted facilities have a clear direction on what steps are necessary for them to comply with the rules and regulations of Indiana and the guarantee that technically and legally sound permits will be issued in a timely fashion. Without permitting certainty, plant expansions, new project opportunities and new jobs creation may be reduced. (NIF)

Response: IDEM believes the proposed rule does provide clear direction on what steps are necessary to comply with the rule. IDEM is committed to complying with statutory permit review timeframes and issuing technically and legally sound permits.

Comment: It is critical in this time of transition for the electric power industry that IDEM develop antidegradation standards and implementation procedures that are: (1) reasonable in balancing protection of water quality and promotion of economic development opportunity; (2)

clear in their meaning and operation; and (3) not more restrictive than other U.S. EPA Region V states. (IUG)

Response: IDEM believes the proposed rule is clear and reasonable in balancing protection of water quality and economic development opportunity. IDEM has recognized certain activities as beneficial, including: "A new or increased loading of a regulated pollutant where:

(A) the new or increased loading is necessary to accomplish a reduction in the release of one (1) or more air pollutants; and

(B) there will be an environmental improvement that will occur when the applicant demonstrates that the reduction in the loading of the air pollutant:

(i) is necessary to meet a state or federal air quality standard or emission requirement; or

(ii) will substantially reduce human exposure to hazardous air pollutants or other air pollutants that are subject to state or federal air quality standards."

These beneficial activities have abbreviated requirements for an antidegradation demonstration.

Comment: In its responses to the September 14, 2011, hearing comments, IDEM stated that it believes that the basic elements of the antidegradation implementation as laid out in the rule are workable for both NPDES discharges and other actions that impact water quality – it is not necessary to address them separately. IUG responds by agreeing that the implementation procedures do not necessarily have to explain all details, but there may well be significant differences in how some aspects of the implementation procedures will or should apply to NPDES discharges versus other actions with water quality impacts. It is important for the regulated community to have enough notice of the scope of the program and its proposed operation to understand how the agency intends to implement its major contexts and how that will impact the obligations under existing law. (IUG)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority including 401 certifications and NPDES permitted discharges. IDEM believes the 401 certification requirements to avoid, minimize, and mitigate for impacts to water quality satisfy antidegradation.

Comment: The proposed antidegradation rule does not address the primary task to create a rule and guidelines that are clear and predictable about the nature and extent of an adequate antidegradation demonstration and about the criteria IDEM will use to accept, modify, or reject a proposed new or increased NPDES permit limit. That decision remains political at the complete discretion of the agency. The proposed rule, similarly, does not establish clear and prediction [*sic*] decision criteria for the overall improvement process in Outstanding State Resource Waters (OSRWs). It simply repeats the Indiana statute. It does establish an implementation regulation for the whole state. Unfortunately, the proposed rule does not address either the first (to fix the well-known deficiencies of the current Great Lakes Basin regulation for new or increased NPDES permit limits) or third (to supply in regulation the procedures for the overall improvement requirement of the Indiana General Assembly for OSRWs when a new or increased NPDES permit limit is requested) of the tasks. And, while not doing the key tasks, the proposed rule goes well beyond the new or increased NPDES permit limit to expand implementation in Indiana to include wetland filling, stream bank cutting and harbor dredging, trace constituents in an NPDES permitted discharge (both those that need an NPDES permit limit and those that do not need an NPDES permit limit), discharges from an indirect discharger into a POTW for a parameter other than has an NPDES permit limit, and storm water run off parameters without an NPDES permit limit, point and nonpoint source. The expansion of loadings have no de minimis thresholds and no written guidance about how or what type of information and how much information of what quality is adequate for an acceptable antidegradation demonstration. There

is no direction for IDEM to make a consistent, predictable, and fair decision about how to approve or disapprove a loading for nonNPDES permit loadings. Since these loadings can occur without a formal request (unlike the formal request of a new or increased NPDES permit limit), procedures are flawed because of missing directions about how and how frequently a request for permission for an increased loading is required. For wetland, stream bank cuts, and harbor dredging, there needs to be clarity about how the information is different than that required for 401 certification. (IEI)

Response: IDEM worked with stakeholders to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA. IDEM believes the proposed rule achieves the goal of preserving Indiana's water quality. IDEM believes that the rule is understandable and workable and that those proposing new or increased loadings have readily available much of the information needed to develop an antidegradation demonstration. To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority including 401 certification and NPDES permitted discharges. IDEM believes the 401 certification requirements to avoid, minimize, and mitigate for impacts to water quality satisfy antidegradation.

Antidegradation Applicability-Trigger

Comment: It must be emphasized again that any proposal to limit antidegradation analysis only to situations where an increased permit limit is contemplated must be rejected. Antidegradation is about preserving assimilative capacity and avoiding unnecessary new or increased pollution. This is true even as to pollutant loadings that were not limited in the past because they were not viewed as having a reasonable potential to cause or contribute to violations of water quality standards. (EC)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to increased permit limits.

Comment: The proposed rule at 327 IAC 2-1.3-1(a) should say the antidegradation standard applies to section 3 and sections 4(a) and 4(b), not just to section 3. (IEI)

Response: 327 IAC 2-1.3-1(a) states that the "antidegradation standards established by section 3 of this rule apply to all surface waters of the state". The antidegradation standards apply to all waters of the state, but it is accurate that the antidegradation standards are established in section 3 of the rule. Section 4 is the section describing the exemptions from the antidegradation demonstration requirements, not exemptions from the antidegradation standards; therefore, IDEM believes the proposed rule language is accurate.

Comment: The applicability section 1(b) language of "subject to the Clean Water Act" means that implementation of the antidegradation rule for waters of the state that are not federal jurisdictional waters is eliminated. 327 IAC 2-1.3-1(a) states that the antidegradation standard applies to loadings on these nonfederal jurisdictional waters, but the implementation procedures IDEM is to use are not to be the ones in this implementation regulation. For example, this implementation excludes isolated wetlands and the moving target of any waters the Court may determine to be outside the jurisdiction of the CWA. (IEI)

Response: The proposed rule applicability section 1(b) language states: **"**The antidegradation implementation procedures established in sections 4 through 7 of this rule apply to a proposed new or increased loading of a regulated pollutant to *surface waters of the state* from a deliberate activity subject to the Clean Water Act, including a change in process or operation that will result in a significant lowering of water quality." Surface waters of the state include both jurisdictional and non-jurisdictional waters.

Comment: The proposed rule states that a "proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity" is subject to an

antidegradation review. The exception for high quality water (HQW) discusses "processes that are covered by an existing applicable permit" such as operational variability, adding shifts, etc. There is too much ambiguity in this area. The antidegradation trigger should be "for a new or increased permit limit". The reason is that an industrial facility often needs to modify equipment, make changes, or even add different types of "production lines" to meet changing customer demand. As an example from recent events at Alcoa's Warrick Operations: Can sheet in the domestic market is slowly decreasing so we are always looking at opportunities to increase our presence in new products or areas. Alcoa had an opportunity to enter a new market, lithographic sheet, with our existing product (aluminum sheet), but it requires a different innovative production line. This new line will have a wastewater stream that will go to the current wastewater treatment plant, but Alcoa will still have a slightly increased level of aluminum in the discharge. Alcoa will still easily meet its current NPDES permit, but this activity, depending on "agency interpretation", may be subject to antidegradation review. Remember, Alcoa is still well within its permit limits but may have more ambiguity in the capital planning process and ability to meet market demand and possibly miss a business opportunity, again depending on "agency interpretation". There are other new and innovative ideas such as changes within our casting house using new technology, etc., that also could be interpreted as a "proposed new" activity but would not need a new permit limit but rather a simple permit modification to state what we are doing and how we are doing it.

Another example is in the water treatment chemical additives. Alcoa's current NPDES permit has zinc as a monitored effluent parameter. Zinc phosphates are often used as a corrosion inhibitor, but, under the proposed rule, any changes to the water treatment additive would require some sort of an antidegradation demonstration even though a small increase would still be within permitted limits. (AWO)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to increased permit limits. IDEM believes the proposed rule is unambiguous as it exempts, in section 4(c)(2), "A new or increased loading that results from one (1) of the following activities that does not require the submission of information beyond what is required to comply with the discharger's existing applicable permit:

(A) A change in loading of a regulated pollutant within the existing capacity and processes that are covered by an existing applicable permit, including, but not limited to, the following:

(i) Normal operational variability, including, but not limited to, intermittent increased loadings due to wet weather conditions.

(ii) A change in intake water pollutants not caused by the discharger.

(iii) Increasing the production hours of the facility, for example, adding a second shift.

(iv) Increasing the rate of production.

(v) A change at an internal outfall that does not directly discharge to a surface water of the state.

(vi) A change in the applicable effluent limitation guideline based on a change in production."

Based on the information provided for the first (aluminum sheet) example, IDEM believes the increased loading is covered by the section 4(c)(2) exemption. The information provided for the second (zinc phosphate) example, is not clear enough to make a determination since it speaks to a monitoring requirement. It may be that the increased loading will be an exempt de minimis increase.

Comment: The antidegradation trigger issue concerns the vagueness with which the rule is written and its interpretation that could create problems going forward. Without the appropriate trigger, our facility could be placed at a disadvantage with neighboring states who

have a antidegradation trigger requiring an antidegradation demonstration only if a new permit limit is necessary. The following is a synopsis of antidegradation triggers from nearby states:

> Ohio – For existing sources, any re-issuance or modification of a national pollutant discharge elimination system permit that, if approved, would result in..The increase in the mass discharge limit attributable to the activity
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> Kentucky - The activities identified in this subparagraph shall not be subject to the antidegradation implementation procedures … The renewal of a KPDES permit that does not authorize pollutant loading to the receiving stream in excess of that previously authorized
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> Illinois - The Agency must assess any proposed increase in pollutant loading that necessitates a new, renewed or modified NPDES permit or any activity requiring a CWA Section 401 certification to determine compliance with this Section.
>
> Iowa - A regulated activity shall not be considered to result in degradation, if:
> A permit for an existing facility does not propose less stringent permit limits or increased treatment plant design capacity; or….

Antidegradation review can be time-consuming and expensive. Such review also can introduce a substantial element of uncertainty into business planning and prediction as to what the outcome will be. Therefore, the proposed rule also should contain: (1) an applicability provision that uses a bright line trigger that necessitates a new or modified NPDES permit; and (2) a provision pertaining to the time for IDEM's rejection or approval of exemption applications. Those in the regulated community should be informed as quickly as possible whether IDEM accepts or rejects an exemption application and need the certainty of knowing that there is a clear time period by which they can expect such a determination. (AWO, ICC, ISEG)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to increased permit limits. IDEM worked with stakeholders to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA. IDEM is committed to complying with statutory permit review timeframes and issuing technically and legally sound permits.

Comment: A review of other states' programs accepted by U. S. EPA confirms that IDEM's regulations do not mandate that antidegradation implementation be applied to any activity with water quality impacts but rather allows for sufficient flexibility for states to base such a trigger on the need for a new or increased permit limit that contributes to a lowering of water quality. The Water Quality Standards Handbook (2d Ed., 1994) (the "Handbook") offers the following statement about when Tier 2 antidegradation review is required:

> The Antidegradation review requirements of [40 C.F.R. Section 131.2(a)(2)] are triggered by any action that would result in the lowering of water quality in a high-quality water. Such activities as new discharges or expansion of existing facilities would presumably lower water quality and would not be permissible unless the State conducts a review consistent with [the regulations]. In addition, no permit may be issued, without an Antidegradation review to a discharger to high-quality waters with effluent limits greater than actual current loadings if such loadings will cause a lowering of water quality.

Thus, U. S. EPA guidance suggests it is appropriate to tie antidegradation review to permit issuance and/or modification. Many states use a trigger based on NPDES permitting. (IUG, FA)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to NPDES permitting. IDEM worked with stakeholders to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA.

Comment: The applicability section, 327 IAC 2-1.3-1, still has the potential to be more broadly read than is intended by IDEM, whose second notice comment responses noted that the

antidegradation rule only applies to activities regulated by the CWA and the state and federal rules which implement the CWA. Thus, it was stated that the antidegradation rule does not apply to nonpoint source activities which are exempt from CWA regulation. This is an appropriate interpretation of the law; however, many activities may be subject to the CWA which are exempt by the terms of the CWA. Therefore, it would be more appropriate that 327 IAC 2-1.3-1(b) state as follows:

"...deliberate activity subject to an NPDES permit under the Clean Water Act..." (IP-FB)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to increased permit limits. IDEM worked with stakeholders to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA. IDEM is committed to complying with statutory permit review timeframes and issuing technically and legally sound permits.

Comment: The antidegradation rule's implementation procedures do not limit antidegradation review only to actions requiring a new or modified NPDES permit subject to Section 402 of the CWA. Instead, 327 IAC 2-1.3-1(b) would apply the implementation procedures to any proposed deliberate activity subject to the CWA that would result in a new or increased loading of a regulated pollutant. However, the actual implementation procedures of sections 4 and 5 of the proposed rule appear to be almost entirely based on the context of an NPDES discharger. Therefore, not only is the scope of applicability of the proposed implementation procedures vague, leaving open to question which activities would be subject to antidegradation review, but the proposed rule lacks meaningful implementation procedures for activities apart from those subject to NPDES permit requirements. The scope of applicability for the proposed antidegradation implementation procedures should be stated in terms of "any new or increased loading of a regulated pollutant to surface waters of the state from an activity requiring issuance of a new or modified NPDES permit that will result in a significant lowering of water quality." This rule language change needs to be made to sections 1(b) and 5(a). (CEG, NIF, NiS, IchC, ICC, ISEG, IUG, IPL, FA)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to increased permit limits. IDEM worked with stakeholders to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA. IDEM is committed to complying with statutory permit review timeframes and issuing technically and legally sound permits.

Comment: The implementation applicability provision (section 1) and the first two implementation sections (4 and 5) of the implementation procedures have been changed by IDEM to apply to not only to a new or increased NPDES permit limit but also to wetland filling, stream bank cutting and harbor dredging, trace constituents in an NPDES permitted discharge (both those that need an NPDES permit limit and those that do not need an NPDES permit limit), discharges from an indirect discharger into a POTW for a parameter other than has an NPDES permit limit, and storm water runoff parameters without an NPDES permit limit, point and nonpoint source. (Section 5(a), where basic information is provided for a demonstration, does use the newly ambiguous term "discharge.") Section 6 (commissioner determination) contains references to "discharge" and even to "discharger." If this proposed rule is adopted, the only definition in Indiana water rules of "discharger" will be of an entity that has a point source. Language must be consistent across all parts of the implementation rule about who the implementation process are designed to address. Even where a section explicitly applies to situations other than the NPDES permit limit increase, the language of the section makes sense only in context of an NPDES permit limit process. This leaves open serious gaps in basic procedures and expectations. That in turn creates opportunity for political chicanery with IDEM

discretionary decisions changing from staff to staff and administration to administration. (IEI)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to increased permit limits. The proposed rule is revised such that references to "discharge" and "discharger" are limited to those relative to NPDES permits.

Comment: The applicability of the section 1(a) antidegradation standard: (1) is restricted to surface waters to be consistent with federal law; (2) is expanded to beyond federal jurisdictional waters to include all waters of the state; and (3) by its silence, applies to all pollutants. Section 3, the antidegradation standard, partly copies federal language including the concept of "significant lowering of water quality" being allowed but then restricts the applicability of the standard itself to "regulated pollutants" instead of all pollutants. The implementation regulation creates many new situations requiring an antidegradation demonstration with no de minimis and no language tailoring the timing of the new requirement or the demonstration to those new situations. (IEI)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority. IDEM worked with stakeholders to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA. Stakeholders expressed concern that applying the rule to all pollutants was too broad and thus IDEM tied applicability to regulated pollutants.

Comment: The antidegradation applicability needs to be limited to actions requiring a new or modified NPDES permit subject to section 402 of the CWA to ensure the antidegradation framework is not applied inappropriately in other instances such as, for example, to ensure the antidegradation framework is not applied to groundwater migrating to surface water or other groundwater discharges not subject to an NPDES permit. (NiS)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to NPDES permits.

Comment: IDEM's response to IUG's comment made at the September 14, 2011, WPCB hearing to consider preliminary adoption of the antidegradation standards and implementation procedures concerning when to start antidegradation review causes IUG to offer the following statement: IDEM offered that to comply with the CWA the antidegradation procedures must apply to all waters of the state. IUG would offer in reply that, by having as a trigger the Section 402 permitting program designed to protect all waters of the state, IDEM should be convinced the antidegradation program is comprehensive. (IUG)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to NPDES permits.

Comment: As proposed this rule is not at all user friendly and will require very skilled technical expertise to evaluate the de minimis formula. It is suggested that IDEM modify section 1(b) of the proposed rule to specifically tie the "trigger" for the antidegradation program review to permitting requirements under section 402 of the Clean Water Act as follows:

> (b) The antidegradation implementation procedures established in sections 4 through 7 of this rule apply to a proposed new or increased loading of a regulated pollutant to surface waters of the state from an ~~deliberate~~ activity requiring permitting under ~~subject to~~ section 402 of the Clean Water Act that will result in a significant lowering of water quality.

This modification to the proposed rule will provide clarity and specific guidance as to when an antidegradation review is required and what the antidegradation review will entail. (IUG)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to NPDES permits.

Definition of Best Available Demonstrated Control Technology (BADCT)

Comment: Section 2(3) of the proposed rule defines BADCT and applies it in proposed section 5(e)(1) that states IDEM will establish accepted effluent limits based on BADCT. However, the proposed rule is silent regarding how IDEM will identify BADCT, how it will determine that the technology it identifies as BADCT "represents cost effective treatment technology that is readily available", and what role the discharger will have in identifying and determining if such technology actually is cost effective and readily available for the discharge in question. Without such information, this provision of the proposed rule cannot be evaluated to determine if it will impose unduly burdensome requirements or is reasonable. Furthermore, it is not possible to determine what costs will be associated with this provision thereby further rendering IDEM'S fiscal impact analysis questionable. This information should be provided to the regulated community and the public for review and comment prior to finalizing the proposed rule. (IPL)

Response: The concept of BADCT is not required to be included as part of the antidegradation implementation procedures; however, IDEM recognizes BADCT as a useful tool that the agency wants the option to have available. When establishing BADCT, IDEM will seek input and feedback from U.S. EPA and other stakeholders.

Comment: The proposed rule includes BADCT, a technology-based treatment limit, as a way to expedite and simplify a full evaluation of technology alternatives in situations where the applicant has demonstrated that there are no nondegradation or mitigation alternatives available. It remains unclear from the record what process IDEM will use to review and update BADCT limits to ensure that the limits continue to reflect the best control technology available as treatment technology continues to improve. How will IDEM keep BADCT limits up-to-date? (EC)

Response: IDEM works to stay aware and knowledgeable of changes in technology and processes and will apply this knowledge when reviewing requests to apply BADCT. The public comment opportunities allow an avenue for submission of information relative to BADCT.

Comment: BADCT is defined in this proposed rule as a "wastewater treatment." This rule defines wastewater at 327 IAC 2-1.3-2(57) to be human excreta; grease, fats, septage, etc. It is not industrial waste water, animal manure waste water, or any waste other than that in human sewage. Therefore, the BADCT definition restricts it only for domestic waste treatment, which is inconsistent with the use it seems to be put to in the implementation section of the rule. (IEI)

Response: The proposed rule is revised to define "wastewater" as liquid or water-carried wastes from industrial, municipal, agricultural, or other sources.

Definition of Discharge

Comment: The proposed regulation changes the definition of "discharge" to "discharge of a regulated pollutant" (327 IAC 2-1.3-2(17) and from "discharge of a pollutant" which means "addition of any pollutant……to any waters of the state from a point source in Indiana" (327 IAC 5-1.5-10 and 11). That means that "discharge" in Article 2 not only is for a different set of substances than Article 5 but could be considered to apply to any release to water, not just point sources as in Article 5. One key term with two different meanings introduces confusing language regarding when the implementation is restricted to point source and when it is not especially with the long history in water law with interpretations based on the original meaning. It is possible to craft careful language to provide whatever meaning is desired without using a word defined two different ways in two interrelated rules. [Fortunately, the proposed rule does not use the problematic terms "discharge" and "regulated pollutant" in any of its rule language for delegated

authority of the federal antidegradation standard. The ambiguous and conflicting terms are only used through the state implementation portions. For instance section 6 (commissioner determination) uses "discharger" where other parts use "person." Discharge" and "loading" seem to be used interchangeably while the standard itself is focused on loading.] (IEI)

Response: The proposed antidegradation standards and implementation procedures apply more broadly than NPDES point source discharges, but do encompass NPDES point source discharges. The proposed rule is revised such that references to "discharger" are limited to those relative to NPDES permits.

Definition of Discharger

Comment: The proposed rule lacks a definition of "discharger". The proposed rule changes the definition of "discharge" from the existing Article 5 definition. Is the definition of "discharger" used in the antidegradation rule intended to be different as well? That would be significant if, as regards antidegradation, a discharger can be an entity other than a point source. The definition of "discharge" in Article 5 is paired tightly with the definition of "discharger". Otherwise, the logic for the action described in this rule's definition is "a discharge is a discharge." In the proposed rule's section 3, antidegradation standards, the term "loading" is used, but the temporary exception to the standard in section 4 refers to "discharge". Without a corresponding definition of "discharger" in the proposed rule, the term "discharge" used for the temporary release is ambiguous as to whether it is just for point source (as in the existing antidegradation rule) or for point source and non-point source. (IEI)

Response: The proposed rule is revised such that references to "discharge" and "discharger" are limited to those relative to NPDES permits.

Definition of High Quality Water (HQW)

Comment: The proposed definition of HQW at 327 IAC 2-1.3-2(25) must be modified to be broader and more practical. The proposed definition is a hybrid of two competing ways to considered [*sic*] impaired waters: overall quality or parameter-specific quality. As a patched together hybrid definition, it is not correct for either. Indiana has selected an EPA-approved parameter-specific measure of high quality because that was the most practical approach for assigning NPDES permit limits to protect water quality. The permit limit is a numeric value for one parameter that the government considers protective of a waterbody and for which the government can measurement [*sic*] compliance. That parameter-specific approach is related to but not the same as overall quality. It is possible to have a water body meet the overall measure of high water quality (e.g. fish and shellfish propagation or recreation) without achieving a particular parameter-specific quality. The inverse is true as well. If a water is achieving the water quality standard for a particular parameter, then the water is considered to be "high quality water" <u>for that parameter</u>. It is not, as the proposed definition says in its final sentence, automatically a "high quality water" inherently for the waterbody or for any other parameter. For that single parameter the water quality is "high quality water" and antidegradation Tier 2 standard applies to that parameter if a loading is proposed that would significantly lower the water quality <u>for that parameter for that water quality standard</u>. If the first part of the definition is needed for federal reasons, the final sentence should be rewritten to say something like: "A water body that has a concentration of a pollutant attaining the water quality standard established for that pollutant in that water body is considered to be a water body of high quality water for that pollutant for the purpose of this rule." The proposed rule has this idea stated correctly and simply at 327 IAC 2-.3-3(b)(1) where it establishes the antidegradation standard. All implementation text should be written directly off this concept. (IEI)

Response: The proposed (and revised) definition of a high quality water (HQW) specifically states that it is assessed pollutant-by-pollutant. In Indiana, a water of the state is

considered to be a HQW unless, on a pollutant-by-pollutant basis, impairments are identified. Impairments are determined using Indiana's Consolidated Assessment Listing Methodology which applies assessment methodologies to generate Indiana's 303(d) list of impaired waters. The 303(d) list identifies impairments pollutant-by-pollutant. Assessments apply criteria (numeric and narrative) set to protect designated uses. IDEM believes the proposed definition is appropriate and consistent with how the concept of a HQW is used.

Comment: Other defects in the HQW definition include:

The use of the phrase "water quality criterion" in the final sentence of the definition of HQW is incorrect. The condition that determines the high quality water in the parameter-specific approach is not the criterion but the standard. Each waterbody has a controlling criterion for each parameter based on the designated uses for the waterbody. The controlling criterion is the water quality standard. That is the criterion that must be achieved to attain status of high quality water for the parameter. (IEI)

Response: IDEM does not agree. The pollutant-by-pollutant assessment, which considers designated uses, necessitates comparison to the relative criterion.

Comment: Additionally:

1. The definition's use of "nontransient aquatic organism" is a useful research tool to provide indication about overall water quality, but, due to logistic reasons, that is not a suitable measure to provide a clear quantitative basis to calculate an unambiguous numeric NPDES permit limit. There are many unresolved technical policy issues: what is the "detection" limit of the analytical procedure to declare a particular trace concentration of a parameter in an organism above a level of confidence to be real enough to declare the water body as not a Tier 2 high quality water for purpose of antidegradation? How nontransient is nontransient? How deep in the sediment? For a sensitive-enough technique "detection" is possible for all naturally present substances. The policy as written makes this an impaired water (Tier I) to which is not allowed any "significant lowering of water quality" regardless of an antidegradation review? (Note that the nontransient phrase is incorrectly connected to the sentence. As written, the meaning is if a substance is not detected in nontransient aquatic organisms at some level the water body is high quality. That is not true. The water column may exceed the standard for a particular parameter without detection in an organism. No organisms sampled automatically means no detect and, according to this definition, automatically high quality water.)
2. The current water quality standards, for better or worse, address only water column components. There are many other related water quality issues such as sediment quality (which Indiana has not yet considered important enough to develop and maintain a serious monitoring program for). The concept of "BCC" was an attempt by U.S. EPA to address the issue of long-term toxicity to a situation it said was unique to Great Lakes Basin that was not addressed in the short-term water quality-based policy of the standard system. Any further sophistication to the system such as addressing harmful loading of persistent compounds that do not bioaccummulate must be accomplished by establishing a scientifically-sound, practical implantation procedure with an appropriate controlling document and enforcement procedure. (IEI)

Response: The proposed rule was revised to correct the definition of a high quality water: "High quality water" or "HQW" means a waterbody, including an ONRW or OSRW, in which, on a pollutant by pollutant basis, the quality of the surface water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water. The term includes any waterbody for which the pollutant has not been detected in: (A) the water column; *and* (B) nontransient aquatic organisms; at levels that would indicate that a water quality criterion is not being met.

Definition of Regulated Pollutant

Comment: The proposed antidegradation rule changes the definitions in Article 2, the water quality standards, to be inconsistent with Article 5, NPDES permit, for the critical terms "discharge" and "regulated pollutant". The proposed rule puts both the standard and the implementation in Article 2. Article 5 governing NPDES permits stands outside the antidegradation rule. Also outside Article 2 implementation are the existing and the missing regulatory controls for the other activities governed by the newly expanded implementation rule in Article 2. It is essential that the terms between the Article 2 implementation and the Article 5 are consistent, ideally identical. The proposed rule creates two inconsistencies in core terms, namely what substances are addressed and what a discharge means. Article 5 governing NPDES permits addresses "pollutants," the core term of the federal CWA. The proposed rule changes what antidegradation implementation addresses for NPDES permit limits (and all other nonNPDES permit limit loading increase situations) from "pollutant" to "regulated pollutant," with a different definition. This is a major change with many consequences that are difficult to assign. The proposed rule does not use the new term "regulated pollutant" directly in the antidegradation standard applicability at 327 IAC 1-1.3-1(a) nor in the antidegradation standard in 327 IAC 1-1.3-3(b),(d) or (c)(1)or(2) nor in the applicability of the standard to temporary discharges (327 IAC 1-1.3-4(a)and (b)). It is used directly in the Tier 1 antidegradation standard, changing the applicability from all pollutants to just those that are "regulated pollutants." That is a basic alteration of the fundamental flexibility to consider impaired waters by federal regulation. The term "regulated pollutant" is used indirectly in the antidegradation standard when "significant lowering of water quality" and "discharge" is used. Instead of the federal focus on all pollutants, these are redefined as restricted to "regulated pollutants." Regulated pollutant is also directly used when describing the overall improvement requirements in Indiana OSRW. However, even though "regulated pollutant" is not used directly in the Tier 2 antidegradation standard, all of the implementation of that standard are restricted to "regulated pollutants" (327 IAC 2-1.3-1(b)). Then regulated pollutant is used almost exclusively throughout the implementation parts of the rule (except for parts such as noncontact cooling water and water treatment additive in 327 IAC 2-1.3-5(b)(3) and (4)). It is strange that a term integral to the Indiana antidegradation implementation procedures is not used once in the antidegradation standard describing what the implementation is to do. This change makes the universe of situations covered by implementation smaller than the federal antidegradation standard and larger than the NPDES permit limit in unpredictable ways. The federal standard applies to all conditions of degradation without exception. The existing rule describes a specific implementation procedure for a subset of situations the standard applies to, namely the new or increased NPDES permit limit. In that rule, whatever substance or condition that can have a permit limit is what is addressed in the implementation. The proposed regulation expands the substances an NPDES permitted discharger must address. The question is how does IDEM intend the term "regulated pollutant" to be different than the Article 5 "pollutant" or the CWA "pollutant?" (IEI)

Response: The existing water quality standards and the proposed antidegradation standards and implementation procedures apply more broadly than NPDES point source discharges, but do encompass NPDES point source discharges. The proposed rule specifically establishes overarching antidegradation standards which are broadly applied. The proposed rule also establishes implementation procedures which are more narrowly applied to specific activities over which IDEM has regulatory authority, which is not limited to NPDES permits. IDEM worked with stakeholders to develop the proposed rule language to comply with the Clean Water Act and Indiana statute and to secure approval of the rule by U.S. EPA. Stakeholders expressed concern that applying the rule to all pollutants was too broad and thus IDEM tied applicability to regulated pollutants.

Comment: The definition of "regulated pollutant" is not clear. The rule defines it as a "parameter of a pollutant," a phrase itself that needs interpretation. Does parameter here mean "component" of a pollutant or aspect of a pollutant? Or does it mean that it is not a pollutant in some significant way? Why should a regulated pollutant not simply be a pollutant? What is the relationship between the "criteria" portion and the "may be in a permit limit" portion of the definition, assuming, if a "parameter of a pollutant" falls under either category, it is a regulated pollutant. Therefore, the subcategory of "excluded" despite a having water quality criteria does not mean excluded from being a regulated pollutant if the parameter could be in a NPDES permit. (IEI)

Response: The proposed rule defines "pollutant" as any of the following when discharged into water:

(A) Dredged spoil.
(B) Solid waste.
(C) Incinerator residue.
(D) Filter backwash.
(E) Sewage.
(F) Garbage.
(G) Sewage sludge.
(H) Munitions.
(I) Chemical wastes.
(J) Biological materials.
(K) Radioactive materials.
(L) Heat.
(M) Wrecked or discarded equipment.
(N) Rock.
(O) Sand.
(P) Cellar dirt.
(Q) Industrial, municipal, or agricultural waste.

The proposed rule defines "Parameter" as a quantitative or characteristic element that describes: the physical; chemical; or biological; conditions of water. Since pollutant is defined broadly, qualifying it with parameter in the definition of regulated pollutant is meant to focus the implementation procedures on measurable characteristics.

Comment: In the definition of "regulated pollutant", what does" adopted in or developed pursuant to" 327 IAC 2-1 or 327 IAC 2-1.5 mean? Presumably, "adopted in" means promulgated by the WPCB in rule at the effective date of the new rule or at any time in the future. Then "developed pursuant to" means IDEM uses the calculation procedures in the existing rule to establish criteria for additional substances based on new toxicity information. There is no limit to the substances that are "regulated pollutants" using this procedure. It is not clear whether such a provision is written to include trace compounds with endocrine hormone disrupter characteristic or to exclude them. Similarly with Tier II values, is the use of the term "criteria" to exclude them or is it intended to revert to former regulatory procedures? Note that this provision is a moot one because the initial trigger for proposed Tier 2 water degradation is that there not only is an applicable water quality criteria but also a water quality standard that is being achieved in the water for the parameter proposed to be increased. (IEI)

Response: In the definition of regulated pollutant, "adopted in" means the narrative and numeric water quality criterion and "developed pursuant to" means the calculation procedures promulgated by the WPCB in rule at 327 IAC 2-1 or 327 IAC 2-1.5.

Comment: Narrative criteria should not be considered as regulated pollutants. The narrative criteria "free-froms" are water conditions caused by pollutants. They are not pollutants themselves. The conditions described do meet the definition of any of the listed pollutants. The

narrative criteria are the ways that all of the listed pollutants could cause impairment to the water. To be practical, a regulated pollutant should be the entities that cause pollution and can be named for control; it should not be the water condition to be alleviated. The narrative criteria provide a condition in the water to be avoided, not a pollutant to be loaded. A "narrative criteria" does not have an available loading capacity to use to determine a de minimis. As a tool, the narrative criteria must be obeyed when issuing NPDES permits as it must be obeyed when addressing all point and nonpoint source contributions to water quality. It is appropriate to consider when evaluating the relative value antidegradation technical options for loading reductions but it, itself, makes no sense at all as being a regulated pollutant. (IEI)

Response: IDEM does not agree. IDEM believes it is appropriate to include narrative criteria in the definition of regulated pollutant because there are pollutants that do not currently have a numeric water quality standard that do merit regulatory review. Additionally, U.S. EPA has voiced concern that implementation procedures should address in some manner the need to protect water quality for those substances for which numeric criteria do not exist. In comments submitted by EPA region 7 to Missouri in March 2008, EPA said "EPA… requests that Missouri clarify with its submission that the current definition of "pollutants of concern" is not limited to just those pollutants with numeric criteria, but also includes other pollutants covered by the state's narrative criteria that have the potential to degrade water quality." IDEM recognizes that narrative water quality criteria cannot be used to establish a de minimis lowering of water quality because a numeric value is necessary to develop the available loading capacity. Though statute requires some inclusion of a de minimis (but de minimis is undefined by statute), IDEM does not believe the statute necessitates a provision for a de minimis for everything. For example, IDEM does not believe it is appropriate to allow de minimis discharges of BCCs.

Comment: Seemingly, the antidegradation proposed rule says that, any specific biological material, pH, and dissolved oxygen are not a regulated pollutant by virtue of the fact that a water quality criteria exists for them. But they, in fact, are all regulated pollutants because a permit may include them. They are definitely included if a permit does include them. Therefore, it is not clear to be what is intended by the language. (IEI)

Response: In the proposed rule, the definition of regulated pollutant says: ""Regulated pollutant" means any:

(A) parameter of a pollutant as defined in subdivision (38):
  (i) for which water quality criteria have been adopted in or developed pursuant to 327 IAC 2-1 or 327 IAC 2-1.5;
  (ii) including:
    (AA) narrative and numeric criteria; and
    (BB) nutrients, specifically phosphorus and nitrogen; and
  (iii) excluding:
    (AA) biological criteria;
    (BB) pH; and
    (CC) dissolved oxygen; and

(B) other parameter of a pollutant as defined in subdivision (38) that may be limited in an NPDES permit as a result of, but not limited to:
  (i) best professional judgment;
  (ii) new source performance standards;
  (iii) best conventional pollutant control technology;
  (iv) best available technology economically achievable; or
  (v) best practicable control technology currently available;

for the appropriate categorical guidelines of 40 CFR 400 to 40 CFR 471."

Note: clause (B) follows clause (A) and begins with "other" indicating a separate, not duplicative, list from the list in clause (A).

Comment: In the definition of "regulated pollutant", what is the meaning of "May be

limited in an NPDES permit"? What pollutant or substance may not be limited in an NPDES permit? Is this meaning to say the universe of chemicals/biological/physical that could be limited somewhere somehow? That is infinite. Is this meaning to say that have been limited in an NPDES permit by the means listed somewhere, somehow? That is finite but large and steadily expanding and goes well beyond numeric criteria that "have been adopted in or developed pursuant to" Indiana water quality criteria rules. Is this referring to a particular NPDES permit situation where IDEM is using one of the listed techniques to establish a particular permit limit for that particular situation? If that is intended, that needs to be stated directly. There is no reason to add the new term "regulated pollutant" for antidegradation implementation, especially a term inconsistent with terms of the federal and state antidegradation standard and the federal and state NPDES permit rule terms. (IEI)

Response: When a pollutant is identified as part of the proposed wastewater discharge, IDEM may determine that a permit limit is necessary to protect water quality and that limit may be established using best professional judgment; new source performance standards; best conventional pollutant control technology; best available technology economically achievable; or best practicable control technology currently available; for the appropriate categorical guidelines of 40 CFR 400 to 40 CFR 471.

Definition of Significant Lowering of Water Quality

Comment: The definition of "Significant lowering of water quality" in the proposed rule is inconsistent with the requirements of IC 13-18-3-2(l)(1)(A) which limits antidegradation review to new or increased loadings "for which a new or increased permit limit is required." A suggested wording change to address this issue is (note added words noted in **bold**):

> "Significant lowering of water quality" means: (A) there is a new or increased loading of a regulated pollutant to a surface water of the state **for which a new or increased permit limit is required** that results in an increase in the ambient concentration of the regulated pollutant and the increased loading is greater than a de minimis lowering of water quality; and (B) none of the provisions of section 4 of this rule applies.

(IchC, ISEG)

Response: IC 13-18-3-2-(l)(1) says: "The [antidegradation] procedures provided by rule under subsection (k) must include the following:

> (1) A definition of significant lowering of water quality that includes a de minimis quantity of additional pollutant load:
>
> (A) for which a new or increased permit limit is required; and
>
> (B) below which antidegradation implementation procedures do not apply."

IDEM believes the statute does not limit the antidegradation implementation procedures to new or increased permit limits, but requires a provision for some de minimis (undefined by the statute) when a new or increased permit limit is required.

Comment: The definition of "Significant lowering of water quality" in the proposed rule has problems both because the definition is circular and uses an incorrect verb for de minimis. De minimis is not defined in the rule. If the "de minimis lowering of water quality" of 327 IAC 2-1.3-2(51)(A) is intended as the de minimis in section 4 despite 327 IAC 2-1.3-2(51)(B) stating: "and none of the provisions of section 4 of this rules applies", then it is a circular definition. "Significant lowering of water quality" is defined in section 2(51) as "greater than de minimis lowering of water quality" which in turn is defined in section 4 as significant lowering of water quality for NPDES permit limit situations; the definitions of both de minimis and significant lowering should be defined in independent terms. Clarification of significant lowering of water quality and de minimis is critical to be in compliance with IC 13-18-3-2(q) and (r) with reference to 13 IC 13-18-3-2(l)(1). Establishing an antidegradation policy with no de minimis,

which is what this regulation does for many activities situations addressed is illegal under state law. Regarding the incorrect verb used with de minimis in the definition of "Significant lowering of water quality" in the proposed rule, the loading per se **"is** not greater than de minimis lowering;" the concept rather is that the loading "does not **cause** a de minimis lowering" or "cause" a significant lowering. The load is water is being added to the water; the lowering is happening in the water. For the purpose of the antidegradation rule, the meaning of "Significant lowering of water quality" and "de minimis" should be unambiguously defined. (IEI)

Response: The proposed rule defines significant lowering of water quality at 327 IAC 2-1.3-2(51):

> "(A) there is a new or increased loading of a regulated pollutant to a surface water of the state that results in an increase in the ambient concentration of the regulated pollutant and the increased loading is greater than a de minimis lowering of water quality; and
>
> (B) none of the provisions of section 4 of this rule applies."

Section 4 of the rule outlines exemptions to the antidegradation demonstration requirements which include how to calculate a de minimis lowering of water quality. Because the definition speaks to "greater than de minimis" and outlines how to calculate de minimis in the exemptions section, it is not circular, but progressive and clear that calculated de minimis loadings are exempt from the antidegradation implementation procedures as required by the statute. IDEM believes the statute does not limit the antidegradation implementation procedures to new or increased permit limits, but requires a provision for some de minimis (undefined by the statute) when a new or increased permit limit is required.

Definition of Total Loading Capacity

Comment: The definition of "Total loading capacity" at 327 IAC 2-1.3-2(53) should be revised as follows including the underlined language as an addition to the definition:

> (53) "Total loading capacity", is expressed as a regulated pollutant mass loading rate per twenty-four (24) hour period, for the waterbody in the area where the water quality is proposed to be lowered, and means the product of the applicable water quality criterion multiplied by the sum of:
>
> (A) the existing effluent flow;
>
> (B) the proposed new or increased effluent flow; and
>
> (C) either:
>
> (i) the approved alternate mixing zone volume for Lake Michigan; or
>
> (ii) the stream design flow.
>
> <u>If there is no applicable numeric water quality criterion, then the commissioner shall instead determine an appropriate water quality value for use in determining total loading capacity, based on consideration of relevant studies and data.</u>

(FA)

Response: IDEM believes it is not appropriate to try and calculate the loading capacity of the receiving waterbody for a pollutant that does not have a numerical water quality criterion. Therefore, it is not possible to determine if the discharge of a pollutant that does not have a numerical water quality criterion will cause a significant lowering of water quality using a numerical approach based on loading capacity. However, if the pollutant, without a water quality criterion, is known or believed to be present in the discharge and it has a technology based effluent limit or if the pollutant is known to cause or contribute to a violation of the narrative water quality standards found in 327 IAC 2-1-6(a) or 327 IAC 2-1.5-8(b), then the pollutant will be required to be included in the antidegradation demonstration.

Definition of Toxic Substance

Comment: In its responses to the September 14, 2011, hearing comments, IDEM stated that it believes the definition of toxic substance is appropriate. IUG continues to urge a definition that has meaning and strongly objects to the language of the definition that includes "are or may become toxic." U.S. EPA has a defined list based upon a balance of factors that result in a definitive determination of a toxic substance to include: "toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms." (CWA Section 307(a)(1)). IDEM explains in its response to comments that it must leave the definition vague on the chance that it would not have time to engage in a rulemaking effort to add a toxic substance to the regulatory list. IDEM has yet to offer a rational or scientific basis as to why EPA's list is not definitive or why IDEM cannot engage in the rulemaking process to create a list of its own if needed. IUG proposes that the definition in the antidegradation proposal be narrowed to "substances that are harmful" because IDEM's rationale for the proposed rule definition is erroneous for the following reasons:

(1) Toxicity is defined by scientific evidence and ultimate administrative rulemaking.

(2) If at a later date a substance is deemed through scientific evidence and rulemaking to be "toxic" then its addition to the antidegradation implementation procedures will be appropriate and not before.

(3) It is unconstitutional to create a regulatory concept so vague as to leave the water quality standard rules ill-defined by failing to implement the prescribed procedures for determining numeric "Tier I" and "Tier II" values to identify toxic characteristics of substances.

(IUG)

Response: The proposed rule defines toxic substances as "substances that are or may become harmful to:

(A) aquatic life;
(B) humans;
(C) other animals;
(D) plants; or
(E) food chains;

when present in sufficient concentrations or combinations. The term includes those substances identified as toxic under Section 307(a)(1) of the CWA."

Because science and technology continue to advance, often at a pace faster than regulatory changes can be made, IDEM continues to contend that it must maintain the authority to regulate toxic substances not currently listed under section 307 A(1) of the CWA.

Comment: The definition of "toxic substances" in proposed rule section 2(54) is sufficiently broad to include any chemical, even if the concentration of the chemical actually being discharged is not toxic. Any chemical can be toxic depending upon its dose. Without a link to the dosage at which the chemical becomes toxic makes this definition unworkable. This definition should be revised to recognize that a substance only becomes toxic and, thus, a toxic substance when the dosage is sufficient to create toxic effects. (IPL)

Response: The proposed rule defines toxic substances as "substances that are or may become harmful to:

(A) aquatic life;
(B) humans;
(C) other animals;
(D) plants; or
(E) food chains;

when present in sufficient concentrations or combinations. The term includes those substances identified as toxic under Section 307(a)(1) of the CWA."

The definition includes the wording, "...when present in sufficient concentrations or combination."

Definition of Endangered and Threatened Species

Comment: The revision and clarification to the definition of "endangered and threatened species" is welcomed. The rule should, however, make it clear in 327 IAC 2-1.3-6(d)(3) that the state listed endangered and threatened species include only such lists that have been subject to public notice and comment. (IUG)

Response: IDEM believes that the definition of endangered or threatened species in the antidegradation standards and implementation rule should include state listed endangered or threatened species, and IDEM has revised the definition for consideration by the Water Pollution Control Board for final adoption to read as follows:

" (20) "Endangered or threatened species" means the following:

(A) Species and designated critical habitat listed as endangered or threatened under 50 CFR 17.11 and 50 CFR 17.12, as in effect on October 1, 2010.*

(B) Species listed as state endangered by the Indiana department of natural resources under the following:

(i)312 IAC 9-3-19.

(ii) 312 IAC 9-4-14.

(iii) 312 IAC 9-5-4.

(iv) 312 IAC 9-6-9.

(v) 312 IAC 9-9-4.

(C) State endangered or threatened species identified in the Natural Resources Commission Information Bulletin #2 as approved by the Indiana Natural Resources Commission.**

*50 CFR 17.11 and 17.12 are incorporated by reference and may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water Quality, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46206.

** The Natural Resources Commission Information Bulletin #2 can be found at www.in.gov\dnr\fishwild."

This definition references the Indiana department of natural resources rules that list the species as well as the list of species on the NRC Bulletin, along with the federal endangered species list that can be found in the federal regulations cited within the definition.

Comment: At the WPCB hearings to consider preliminary adoption of the antidegradation draft rules, several commenters expressed concern that prior versions of the draft rule failed to specifically include threatened and endangered species defined under state law. In its response to the hearing comments, IDEM agreed that "the definition of endangered or threatened species in the antidegradation standards and implementation rule should include state listed endangered or threatened species." IDEM stated that it "anticipates changing the definition for consideration by the WPCB" to include state listed species. This change should be made before the final adoption hearing. (EC)

Response: IDEM agrees and the proposed rule has been revised to reflect that change.

Definition of Wastewater

Comment: The definition of "wastewater" contained in the proposed rule at section 2(57) is a specialized definition associated with septage haulers formerly codified in statute at IC 13-11-2-256 (repealed by P.L. 159-2011, SEC. 49) that is inappropriate for general usage in the

proposed rule. The IUG recommends that this definition be deleted from the proposed rule. (IUG)

Response: IDEM agrees and the proposed rule is revised to define "wastewater" as liquid or water-carried wastes from industrial, municipal, agricultural, or other sources.

Antidegradation Standard - Tiers 2 and 2.9

Comment: The antidegradation standards for Tiers 2 and 2.9 in proposed rule section 3(b) and (c) require the commissioner to assure that the "highest statutory and regulatory requirements for all new and existing sources are applied" to a discharger if a significant lowering of water quality will be allowed. However, the proposed rule is silent regarding how this will be done. If this rule provision would allow the commissioner to impose requirements on a discharger that are based on requirements for dischargers in industrial categories that are different from the discharger's industrial category or have not been demonstrated to be applicable control technologies for the discharger in question, IDEM should be required to demonstrate that such controls are appropriate for the discharger in question prior to requiring the use of such controls. This provision should be revised to state that the highest statutory and regulatory requirements for all new and existing point sources to be considered are limited to those statutory and regulatory requirements that apply to point sources in the same industrial classification and are subject to the same effluent limit guidelines that apply to the activities and processes used by the discharger in question. (IPL)

Response: The antidegradation standards continue to incorporate the CWA language that the standards assure "the highest statutory and regulatory requirements for all new and existing point sources are applied." IDEM does not intend to use this language to impose requirements on a discharger that are based on requirements for dischargers in industrial categories that are different from the discharger's industrial category or have not been demonstrated to be applicable control technologies for the discharge in question.

Antidegradation Demonstration

Comment: Proposed rule section 5 identifies the types of information that must be included in an antidegradation demonstration. However, the proposed rule is silent regarding the amount of documentation and specific information that must be included as part of a submission to adequately support an antidegradation demonstration. Without having guidance about the necessary information for an antidegradation demonstration, the regulated community cannot determine if such information is appropriate and will not result in unduly burdensome requirements. Preparing information for each of the generic topics identified by IDEM for inclusion in antidegradation demonstrations could range from fairly basic documents to major studies. IDEM should provide the regulated community as well as the public with information regarding what it believes is necessary for a sufficient antidegradation demonstration before this rule is finalized to ensure the proposed rule and its economic impact can be adequately evaluate and commented upon. Finally, the detailed information regarding the amount and scope of information that must be included to satisfy each of the antidegradation demonstration topics identified in the proposed rule should be spelled out in the rule itself and not through guidance. (IPL)

Response: IDEM believes the proposed rule achieves the goal of preserving Indiana's water quality and will impose new requirements. IDEM does not believe these requirements are unduly burdensome. IDEM believes it is appropriate for those proposing new or increased loadings justify that degrading loadings are necessary and accommodate important social or economic benefit. IDEM believes that those proposing new or increased loadings have readily available much of the information needed to develop an antidegradation demonstration. The proposed rule allows for flexibility in terms of the information submitted as part of a

demonstration and IDEM believes that flexibility allows entities to better tailor demonstrations to their specific situations.

Comment: The basic information to be provided for all antidegradation reviews under 327 IAC 2-1.3-5(a) asks for confusing and internally inconsistent demonstration requirements. This is for any person with new or increased loading that would cause significant lowering of water quality not exempted. That language correctly mirrors the standard being implemented. However, subsection (a) shifts from "loading" as the event regulated to "discharge." The remaining implementation subsections return to "loading" except where the context of the sentence is a facility adding material through a pipe. However, the only exemption for significant lowering is nonBCC NPDES permit limited substances. Therefore, many substances posing negligible impacts but yet present in amounts above "zero" are incorporated in the information reporting requirements. Naming the proposed regulated pollutants proposed to be "discharged" is a huge policy challenge. Is it intended to be substances of consequence or to be all regulated pollutants present regardless of the quantity or concentration? (IEI)

Response: It is intended, as the proposed rules states, to apply to a "new or increased loading that would cause a significant lowering of water quality that is not exempt". To clarify, the proposed rule is revised such that references to "discharge" and "discharger" are limited to those relative to NPDES permits.

Comment: The basic information to be provided for all antidegradation reviews under 327 IAC 2-1.3-5(a)(2) asks for concentration and mass loading of "all regulated pollutants". For point source NPDES regulated pollutants with new or increased permit limits this is an answerable question. For point source regulated pollutants without permit limits and zero de minimis, the estimation of range of projected actual "concentration and mass loading" is much more difficult. For nonpoint source regulated pollutants, there seems to be no idea, scientifically, as how to begin to guess the trace, insignificant substances naturally present with a load increase just because water flow is increasing. Even for human added substances, the calculations would vary from year to year, acre to acre and be dependent on weather conditions. For wetland filling and stream bank cutting, what is expected is unidentifiable. The basic information to be provided for all antidegradation reviews under 327 IAC 2-1.3-5(a)(4) asks for information about the conditions of the receiving water or waters. This is "available information" plus information requested by IDEM. In theory, this is a practical requirement although it is easy to see how it could be abused by a government agency that does not want a particular discharge but does not want to make a determination to do that. As written, this is the general condition but not the condition of the water as related to the regulated pollutants proposed to be increased. For practical reasons, this is probably the best that can be done. However, if the purpose of the exercise is to estimate and reduce the impact on the water of a "regulated pollutant" in some way independent of all other factors, then it is unusual that the existing condition is not evaluated. It is due to overcoming technical difficulties as would be posed by a study of existing conditions related to a regulated pollutants [*sic*] that the NPDES permit system is written the way it is. (IEI)

Response: The expectation for this requirement is that the person requesting a new or increased loading that would cause a significant lowering of water quality will make an honest effort to reasonably describe what is in the proposed new or increased loading.

Comment: 327 IAC 2-1.3-5(a) should be revised to read as follows including the underlined language as an addition to the proposed rule language:

> Sec. 5. (a) Any person requesting a new or increased loading <u>that requires a new or increased permit limit and</u> that would cause a significant lowering of water quality that is not exempt under section 4 of this rule must submit the information described in this section to the commissioner to support the commissioner's determination that the proposed new or increased loading is necessary and accommodates important social or economic development in the area of the discharge. The following basic information must be submitted:

(FA)

Response: To comply with the Clean Water Act, antidegradation implementation procedures apply to those activities over which IDEM has regulatory authority, which is not limited to increased permit limits.

Comment: 327 IAC 2-1.3-5(b) should be revised to read as follows including the deleted and underlined language as changes to the proposed rule language:

(b) An antidegradation demonstration ~~that includes the basic information required under subsection (a) and the necessary information required under subsection (c) shall be submitted~~ shall not be required for the following beneficial activities that result in a new or increased loading:

(FA)

Response: IDEM believes to comply with the CWA it is appropriate for loadings that result in a significant lowering of water quality submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary.

Comment: 327 IAC 2-1.3-5(b) and (c) list information requirements for activities labeled as "beneficial activities." These activities are exempt from the requirement to submit information listed in subsection (g) for a social/economic determination. The implication evidently is that by labeling the activities as "beneficial activities," the WPCB has made the determination that these activities meet the U.S. EPA requirement for accommodating important social or economic development in the area. Categories of activities should be considered inherently as always accommodating important social or economic development in the area wherever the loading occurs. However, as written, the proposed rule seems to say that a party could later challenge that the commissioner did not make that case with correct information. A way to avoid this is simply to declare in the rule that the designated activities are exempt from supplying subsection (g) information because they do accommodate important social or economic development in the area of the loading. Simply being a "beneficial activity", per se, is not the quality that meets those antidegradation decision criteria. Also, section 6(a), which describes how the commissioner makes the "accommodates important social or economic development in the area" determination, should be expanded to include explicitly the point that a "beneficial activity listed in subsection (b) and (d)" is either a situation that the commissioner "may" consider, "must" consider, or "must" approve, depending on what is intended. (IEI)

Response: Prior drafts of the rule exempted these beneficial activities from the antidegradation demonstration altogether. IDEM believes to comply with the CWA it is appropriate for loadings that result in a significant lowering of water quality submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary.

Comment: 327 IAC 2-1.3-5(c) and (e) require inconsistent and redundant requests for technical demonstrations. Some "beneficial activities" (327 IAC 2-1.3-5(b)) need only provide subsection (c) information but not subsection (e). Other beneficial activities (327 IAC 2-1.3-5(d)) and all other activities causing a new or increased loading that is permanent and will cause a significant lowering of water quality must do both. Subsection (e) is the critical part of the regulation where information about the particular technology will be used to reduce the "significant lowering of water quality." A person is required here to declare a selection of either: (1) "Best Available Demonstrated Control Technology" (BADCT) that has already been established by IDEM for that type of loading; or (2) "alternative or enhanced treatment standards." It must be emphasized that this key component of the demonstration is written exclusively in language of the NPDES permit system. BADCT is defined as a "technology-based effluent limit" and around "wastewater treatment." These terms make no sense for storm water loadings, wetland filling, stream bank cutting, and harbor dredging or any situation other than a point source discharge. Similarly "alternative or enhanced treatment techniques" implies treating a point source effluent. The problems with this rule language in section 5(c) and 5(e) include the

following:

- There is no direction in subsection (e) of what is expected as demonstration information about what actions to take for other than the NPDES permit limit increase. BADCT makes sense in theory (if the definition is changed restricting its use to sewage) but the logistics of IDEM developing and maintaining in advance of any request for an increase, an up-to-date list of all BADCTs for each type of discharge situation makes this promised option seem impractical. The closest analogy is the BACT system in air which has a narrow focus on several pollutants and a large federal and private sector infrastructure assessing developing treatment technologies.
- For "alternative or enhanced treatment techniques," it is not clear from the rule language how this differs from subsection (c) information. There needs to be an unambiguous connection between subsections (c) and (e). Subsection (c) should evaluate measures to reduce loading according a set of criteria that are identical to what subsection (e) uses to justify selection of an alternative strategy to the proposed permit limit.

The unstated assumption in subsection (e) is that there is an operational setup preferred by the discharger with a proposed new or increased NPDES permit limit increase that complies with the CWA and state law. The sole focus of subsection (e) is about whether the effluent from that operational system can be treated by a different "technique" than what is proposed or if the treatment technique proposed can be "enhanced" for greater removal of the particular substance. This differs from subsection (c) information in that subsection (c) mentions effluent treatment techniques only indirectly but instead devotes primary attention to pollution prevention (in other words change the process causing the increase in effluent loading to reduce the use of the substance itself). If this subsection intended to match 327 IAC 1-1.3-1(b) for situations other than NPDES permit limits, then it must be expanded accordingly. (IEI)

Response: The proposed rule is revised to define "wastewater" as liquid or water-carried wastes from industrial, municipal, agricultural, or other sources. IDEM believes the most useful application of BADCT will be for NPDES, particularly domestic waste discharges. BADCT is a useful tool that IDEM wants the ability to use when it is available. Subsections (a), (c), (e), and (g) of Section 5 contain different components of an antidegradation demonstration. For some activities, IDEM believes a sufficient demonstration need only include the basic information in (a) and the necessary information in (c) while other activities may also require the alternatives analysis in (e) and yet other activities may also require the social and economic analysis in (g). The necessary information requested in (c) is to identify why there must be an increased loading and the alternative analysis information requested in (e) is to identify the best treatment options for the demonstrated necessary increase in loading.

Comment: Aside from the redundancies between 327 IAC 2-1.3-5(c), and (e), subsection (c) with which almost all parties with new or increased load must comply needs much more explanation to be implemented fairly and effectively. The following are defects in subsection (c):

- One serious defect in the subsection (c) component is a missing factor for evaluating the relative value of options. When evaluating ways to reduce impact of increased loading a critical factor of evaluation is the context of the nature and degree of the impact of the loading on the receiving body. What are cost-benefits of that? The sole analysis is of the options themselves. That is fine but not complete.
- The second defect is the absence of an indication about how much information of what quality is enough. Is a small loading by a small farmer expected to have the same quality of analysis as a major new power plant?
- The structure itself has internal overlaps. If no degradation and minimal degradation (section 5(c)(1)(A) and (B)) are to include all ways to reduce the loading, there is no reason to continue with subsequent requests for the same information (section 5(c)(1)(C) and 5(c)2(A)). On the other hand, if all degradation mitigation techniques and alternatives " including" the 5(c)(2) list are to be done, there is no reason to do a "no degradation"

and “minimal degradation” techniques and alternatives.

It is clear what is being requested, but it should be rewritten in orderly and clear manner so the party and agency have the same understanding of the scope expected for each aspect without redundancy among the requests.

Other problems with the information requested in section 5(c) include the following:

1. Section 5(c)(1)(A) concerning availability, reliability and cost-effectiveness, and technical feasibility of “no degradation” for a new or increased NPDES permit limit of nonBCC means less than the de minimis established as “significant lowering of water quality and for all other situations addressed in this proposed implementation rule, this means no increase larger than “zero”. The amount of information to satisfy this rule requirement for the NPDES permit limit could be a back-of-envelope paragraph or a PhD thesis.
2. Section 5(c)(1)(B) concerning availability, reliability and cost-effectiveness, and technical feasibility of “minimal degradation” for a new or increased NPDES permit limit of nonBCC this evidently means greater than the de minimis established as “significant lowering of water quality” but less than allowed for the permit limit by BAT and water quality-based effluent limits and for all other situations addressed in this proposed implementation rule, this means increase larger than “zero” but less than whatever would otherwise be legal to do.
3. Section 5(c)(1)(C) concerning availability, reliability and cost-effectiveness, and technical feasibility of “degradation mitigation techniques or alternatives” makes sense only by assuming that really what it means is for a discharger to provide the specific information requested in section 5(c)(2)(A), (B), and (C) and not to repeat the thorough written analysis of all options under minimal degradation and no degradation. And the only way the three conditions make sense is if they are NPDES permit situations. Evidently, section 5(c)(1)(C) is intended to be a catchall in the same way that the analyses in sections 5(c)(1)(A) and 5(c)(1)(B) have no constraints on the measures to be taken to lowering the loading or the impact of the loading; it is not clear what the universe of such measures would be beyond what was analyzed for “no degradation” and analyzed again for “minimal degradation.” (IEI)

Response: Section 5, subsection (c) states that: “For each regulated pollutant in the proposed new or increased loading associated with activities in subsections (b), (d), and (f), each antidegradation demonstration shall include the following necessary information:

(1) The availability, reliability, cost-effectiveness, and technical feasibility of the following:

(A) No degradation.

(B) Minimal degradation.

(C) Degradation mitigation techniques or alternatives.”

IDEM believes that requiring information on the availability, reliability, cost-effectiveness, and technical feasibility of options relative to the proposed new or increased loading addresses the costs and benefits of those options. IDEM believes that it is important that a person proposing a new or increased loading speak to options including the ability/inability to complete the activity with no increased loading or “no degradation”, non-significant lowering or “minimal degradation”, and, for significant lowering, “degradation mitigation techniques or alternatives”. IDEM believes for all components of the antidegradation demonstration, it is important to leave flexibility in the information requirements as IDEM recognizes one size will not fit all situations.

Comment: If the meaning in section 5(c)(2)(A), (B), and (C) refers to NPDES permit situations, then the three specific additional analyses required under clauses (A), (B), and (C) have the following problem(s) [Note: part 1 of a multi part comment follows with response provided to each part separately]:

1. Although it is not explained clearly in the proposed antidegradation rule, the analysis requested under section 5(c)(2)(A) does not address any effluent treatment technique. Pollution prevention as defined by state law at IC 13-11-2-166 and by the definition in this rule is solely about source reduction in industrial processes. Can you change your industrial process to have no or less load of a particular substance? This federal concept is applied to industrial point source dischargers. Note that the primary purpose of this 1990 federal law is to avoid industrial shifting of pollutants or environmental impacts among water, air, and land as is required by the various environmental laws, each addressing single environmental medium. For instance, removing sulfur dioxide from coal combustion creates much more carbon dioxide emissions and sludge to be disposed of on land. (IEI)

Response: The intent of this component of the necessary information is for the person proposing a new or increased loading to perform a pollution prevention evaluation. The proposed rule defines pollution prevention as the term as defined by the U. S. EPA under the following:

(A) The federal Pollution Prevention Act, 42 U.S.C. 13101 et seq.

(B) The U. S. EPA pollution prevention policy statement (June 15, 1993).

The U. S. EPA pollution prevention policy statement (June 15, 1993) says "EPA has defined pollution prevention as "source reduction" as that term is explained under the Pollution Prevention Act, as well as protecting natural resources through conservation or increased efficiency in the use of energy, water, or other materials." 42 U.S.C. 13101 says "The term "source reduction" means any practice which

(i) reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and

(ii) reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control."

It goes on to say "The term "source reduction" does not include any practice which alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service." These definitions are not limited to industrial processes.

Comment: With regard to section 5(c)(2)(B), is it possible to have another party treat your effluent? This seems to be a yes or no question, without regard for the impact on the environment project [*sic*], the capital and operating costs or even whether it would result in a lower loading than if you were to treat the effluent yourself. (IEI)

Response: The intent of this component of the necessary information is to identify if there are effluent reduction benefits and water quality benefits to connecting to an existing POTW.

Comment: If the meaning in section 5(c)(2)(A), (B), and (C) refers to NPDES permit situations, then the three specific additional analyses required under clauses (A), (B), and (C) have the following problem(s) [Note: part 2 of a multi part comment follows with response provided to each part separately]:

2. According to section 5(c)(2)(C), a POTW with an increase from an indirect discharger, must have the discharger perform a complete pollution prevention analysis for the substance to be increased and report CSO outfalls between indirect discharger and the POTW. The trigger is whether "the proposed significant lowering of water quality" is from an indirect discharger. If the increased loading of the substance requires an increased NPDES permit limit for the POTW, then the "significant lowering" is

determined by the regulation based on the available loading capacity for the POTW and substance. If the increase of a particular substance by the indirect discharger does not require an increase of that substance's limit to the POTW NPDES permit, the regulation is clear at 327 IAC 2-1.3-4(c)(2) that no antidegradation review is needed for substances covered by permit limits. The assumption is that the calculations allow for variations in concentrations over the course of the month and year provided they stay within permit conditions. However, increases by an indirect discharger for substances where the POTW is not required to have an NPDES permit limit have no de minimis. All such increases from the POTW require a complete antidegradation review and, in this subsection, all such increases require indirect discharger to perform a pollution prevention analysis. According to 327 IAC 2-1.3-4(c), there is no de minimis for a situation other than for a substance from a point source that has an NPDES permit limit. Most "regulated pollutants" (according to the new definition of the proposed rule) that are in an average indirect discharger's discharge and in an average POTW NPDES permitted discharge do not require an NPDES permit limit. All of these substances will have "zero" as a significant lowering of water quality threshold for the new antidegradation review. The regulatory procedures are silent on when and how to address these, but, according to the proposed rule, there can be no increase of a substance without a permit limit above what would be its existing effluent quality without an antidegradation review. Since increases and decreases of such trace substances occur regularly without measurement, the notion of "existing effluent quality" must be placed into regulatory language in practical terms if the rule is to be adopted with this new concept. There must be measurement requirements and variability accounted for so that at least the increase is a real increase of significance. Performing a pollution prevention analysis on discharges in quantities too small to require a permit limit is something that should carefully considered. It probably should be restricted to be performed only at the time of the five-year permit renewal where all pretreatment is considered. If the substances that trigger the "above zero" trigger are in the intake water from ground water or public water supply, they should be excluded from an automatic pollution prevention analysis but should be their own targeted analysis depending on the situation. (IEI)

Response: The intent of this component of the necessary information is to ensure that, when a POTW is considering accepting additional flow from an indirect discharger, the POTW considers if an increased discharge of a regulated pollutant is necessary.

Comment: If the meaning in section 5(c)(2)(A), (B), and (C) refers to NPDES permit situations, then the three specific additional analyses required under clauses (A), (B), and (C) have the following problem(s) [Note: part 3 of a multi part comment follows with response provided to each part separately]:

3. According to section 5(c)(3), every NPDES permit holder and every other person triggering the new antidegradation review must include in the antidegradation information an analysis of "availability, cost-effectiveness, and technical feasibility" of "central or regional sewage collection" including those in government planning documents. Performing this assessment makes no sense for everyone to do at each antidegradation review. Is every POTW to pay for an assessment of regional sewers each time they proposed an increase? Is every power plant discharging to a river to perform this analysis for the area some distance from the plant? Is every storm water runoff property owner? Indirect discharger to a POTW? Filling wetland? Cutting stream bank? This requirement should be restricted to those situations where IDEM has identified that a regional sewage treatment capability is missing and could be useful and to those parties who could be in a position to implement it (e.g. local government units). (IEI)

Response: The intent of this component of the necessary information is for each POTW to be aware of and identify state or local water quality planning documents and applicable facility

planning documents that apply to the POTW.

Comment: If the meaning in section 5(c)(2)(A), (B), and (C) refers to NPDES permit situations, then the three specific additional analyses required under clauses (A), (B), and (C) have the following problem(s) [Note: part 4 of a multi part comment follows with response provided to each part separately]:

4. According to section 5(c)(4), a study must be performed of the "availability, cost-effectiveness, and technical feasibility" of discharging to another water body with "higher assimilative capacity for the regulated pollutant" and that is not an OSRW. The definition of water body for this purpose is critical. Is this intended to be moving water out of a 10-digit watershed to a second watershed? Or is it feasibility of discharging 100 yards downstream? How many options and how far are away are options to be considered? New facilities in the planning stage have good possibility to consider discharging to another waterbody, but existing facilities have much less opportunity to consider this option given the large amount of capital investments they have in their existing locations. Therefore, this rule requirement should be a "may" provision for existing dischargers. This rule requirement should also include a study of the potential of negative environmental or energy consequences since moving water from one waterbody to another on a large scale may have negative consequences for the aquatic community or aquatic recharge potential in the original waterbody. To perform this for every antidegradation request is an enormous waste of effort and unnecessary potential for conflict. (IEI)

Response: The intent of this component of the necessary information is for a person proposing a new or increased loading consider the impact of options regarding the location of the new or increased loading.

Comment: If the meaning in section 5(c)(2)(A), (B), and (C) refers to NPDES permit situations, then the three specific additional analyses required under clauses (A), (B), and (C) have the following problem(s) [Note: part 5 of a multi part comment follows with response provided to each part separately]:

5. A study to divert water flow from a nonpoint source is highly problematic. Is it expected that the water is to be collected in order to be diverted to a new waterbody? What is a waterbody in terms of nonpoint source that is running off at many diverse locations? It would seem logical that the provision of section 5(c)(4) only applies to point sources, but, since the proposed antidegradation rule is changing water definitions for Article 2 in a manner inconsistent with Article 5, it could be claimed that section 5(c)(4) applies to nonpoint discharges. In Article 5 "discharge" is defined as "a discharge of a pollutant" and "discharge of a pollutant" is an addition from a point source (327 IAC 5-1.5-10 and 11); however, in Article 2 "discharge" is defined as "discharge of a <u>regulated</u> pollutant" without further modification saying it is a point source. The argument further assumes that the WPCB must mean something different between "pollutant" of Article 5 and "regulated pollutant" of Article 2 or it would not have introduced this new concept for antidegradation. Does the provision of section 5(c)(4) apply to nonpoint sources and if not, how will the proposed rule be changed to clarify this? (IEI)

Response: The intent of this component of the necessary information is for a person proposing a new or increased loading to consider the impact of options regarding the location of the new or increased loading. This could include a nonpoint source; however, antidegradation implementation procedures apply only to those activities over which IDEM has regulatory authority.

Comment: Among the information requested at 327 IAC 2-1.3-5(e), there is no request for discussing the costs and benefits of the reduction of impact of the loading on the receiving water itself. (IEI)

Response: A discussion of the costs and benefits of the reduction of impact of the loading on the receiving water itself should be included in the necessary information required in 327 IAC 2-1.3-5(c).

Comment: A serious deficiency in section 5 is that there is no explicit requirement to study the feasibility of substituting a nonBCC for a BCC. The core provision of the federal Great Lakes Initiative is for such a study. GLI targeted its policy toward the industries that would introduce new chemicals in their operation that would have DDT-like and PCB-like. The corresponding federal regulation for the Great Lakes Basin said that if you proposed to do this, the discharger must do a study to determine what it would take to replace the BCC with a nonBCC. The proposed antidegradation rule eliminates the prohibition of any increase discharge of BCC to the Great Lakes Basin for waters other than OSRW and eliminates the prohibition of discharge into the Great Lakes Basin OSRW for mercury. The existing rule did not need the provision to substitute BCC with nonBCC because of the prohibition; remove the prohibition and the substitution study must be added. The provisions in section 5(c) allow for a discharger to evaluate change to nonBCC but neither requires it nor gives credit for such a review. A fix can easily be added to the pollution prevention requirement in subsection (c), but for the fact that subsection (b) activities are not required to do subsection (c). (IEI)

Response: IDEM believes that the antidegradation demonstration requirements in 327 IAC 2-1.3-5 (c) which ask for the "availability, reliability, cost-effectiveness, and technical feasibility of no degradation; minimal degradation; and degradation mitigation techniques or alternatives" include consideration of substituting a non-BCC for any BCC increase in effluent other than that BCC from source water.

Comment: The rule language of section 5(g) is language that IDEM requested the General Assembly to adopt. The information requests have redundancies and ambiguities. The proposed rule does not give any indication about the nature and extent of information expected for any particular topic listed and it does not say how the information will be evaluated. Therefore, this half of the antidegradation demonstration test is completely at the discretion of the commissioner to favor one party and not another. (IEI)

Response: IDEM believes for all components of the antidegradation demonstration, it is important to leave flexibility in the information requirements as IDEM recognizes one size will not fit all situations. Section 6 of the proposed rule speaks generally to how the antidegradation demonstration information will be evaluated.

Comment: The language of at least three of the proposed rule's section 5 exemptions – 327 IAC 2-1.3-5(b)(5), 5(d)(1), and 5(d)(2) – is inconsistent with federal regulations and antidegradation policy. These three section 5 exemptions allow a non-de minimis new or increased loading of pollutants, including BCCs, into a waterbody without a demonstration that the new or increased loading is socially or economically important or beneficial. These exemptions should be brought into alignment with federal requirements pursuant to the CWA. The Tier 2 Antidegradation Standard in 40 CFR Part 131.12(a)(2) requires that for high quality waters – i.e., where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water – the existing water quality must be maintained and protected "unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located." The Great Lakes Water Quality Initiative (GLWQI) Guidance in 40 CFR Part 132 "identifies minimum water quality standards, antidegradation policies, and implementation procedures for the Great Lakes System to protect human health, aquatic life, and wildlife." (40 CFR Part 132.1(a)) Indiana's antidegradation program "do[es] not need to be identical to the Guidance in this part, but must contain provisions that are consistent with (i.e., as protective as) the Guidance in this part. (40 CFR Part 132.1(b)) Also, Indiana "must adopt provisions

consistent with the Guidance in this part applicable to waters in the Great Lakes System or be subject to EPA promulgation of its terms pursuant to this part," (40 CFR Part 132.1(c)), and Indiana "shall adopt requirements applicable to waters of the Great Lakes System for the purposes of sections 118, 301, 303, and 402 of the Clean Water Act that are consistent with . . . (6) The Antidegradation Policy in Appendix E of this part." (40 CFR Part 132.4(a)(6)) Appendix E contains a specific and limited set of exemptions from a full antidegradation demonstration for new or increased loadings of BCC's into the Great Lakes. Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part A of a multi part comment follows with response provided to each part separately]:

A. Because the proposed rule section 5(b)(5) and section 5(d)(2) exemptions apply to discharges of non-de minimis new or increased loadings of BCCs, these exemptions make it easier for a facility to discharge BCC's into a HQW without doing a full antidegradation demonstration than do the exemptions in Part 132, App. E; thus, the Indiana proposed rule, as applied to Lake Michigan, is less stringent than and inconsistent with 40 CFR Part 132. (CLC-AGL, EC)

Response: The federal regulations and guidance documents do not prohibit an increase in the loading of a BCC to any OSRW since the federal regulations and guidance documents do not address waters designated as OSRWs. Since there is no federal requirement to prohibit an increase in the loading of a BCC to high quality waters, including OSRWs, there is also no need to place more stringent requirements in the Indiana rules.
IDEM believes the activities in section 5(b)(5) and section 5(d)(2), as they result in environmental improvements, are environmentally beneficial and, therefore, do not need to complete the social and economic analysis component of the antidegradation demonstration. IDEM believes to comply with the CWA it is appropriate that these types activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary and the activities in section 5(d)(2) must additionally submit an alternatives analysis – they are not wholly exempt from the antidegradation requirements.

Comment: Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part B of a multi part comment follows with response provided to each part separately]:

B. Because the proposed rule's section 5(b)(5), section 5(d)(1), and section 5(d)(2) exemptions apply to discharges of BCCs, they are significantly different than the analogous exemptions in the existing antidegradation rule, and IDEM has not justified this change. The pollution trading exemptions in the existing Indiana antidegradation rule expressly do not apply to BCCs, but the proposed rule exemptions at section 5(b)(5), section 5(d)(1), and section 5(d)(2) do exempt discharges of BCCs from a full antidegradation demonstration, which is a significant change from the existing rule. Why did IDEM make this significant change in these exemptions? (CLC-AGL, EC)

Response: The prohibition against any increase in the loading of a BCC to an OSRW in the Great Lakes basin, found only in Indiana rules, is above and beyond the requirements found in federal antidegradation regulations and guidance requirements. The federal regulations and guidance documents do not prohibit an increase in the loading of a BCC to any OSRW since the federal regulations and guidance documents do not address waters designated as OSRWs. Since there is no federal requirement to prohibit an increase in the loading of a BCC to high quality waters, including OSRWs, there is also no need to place more stringent requirements in the Indiana rules. Additionally, IDEM believes it is appropriate to recognize the ubiquitous nature of the BCC, mercury. The proposed rule does not allow for a de minimis lowering of water quality for any BCC, including mercury. Any new or increased loading of a BCC,

including mercury, is a significant lowering of water quality requiring some level of an antidegradation demonstration unless it is an exempt, short-term, temporary loading or a parameter already limited in a permit (Sec. 4(c)(2)).

Comment: Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part C of a multi part comment follows with response provided to each part separately]:

C. The exemption in the proposed rule's section 5(b)(5) allows a significant increase in the loading of a pollutant in one community in exchange for a decreased loading of the pollutant in another community, without socio-economic review, so long as the two communities are in the same 10 digit HUC and there is a net decrease in the loading of the pollutant in the 10 digit HUC. (See also the section 5(b)(1) exemption, which also allows watershed trading but is somewhat more narrowly tailored.) The problem with this pollution trading scheme is that it does not meet any of the justifications consistent with the perspectives of EPA and the courts for an exemption from a full Tier 2 antidegradation demonstration. At least one of the following three justifications must be met by an exemption from an antidegradation demonstration:

1. The change in loading will result in a de minimis decrease in water quality in the receiving waterbody over the range of likely loadings – that is, the decline in water quality is not large enough to worry about.
2. The state presents evidence that a procedure outside of the antidegradation implementation rule sufficiently substitutes for that part of the antidegradation demonstration that is omitted.
3. The state presents evidence that all of the circumstances that would qualify for the exemption are likely to be socially or economically important (or beneficial).

A 10 digit HUC almost certainly encompasses different communities as well as different tributaries and/or lakes. A typical example of a 10 digit HUC in northwest Indiana shows that Burns Harbor and Beverly Shores are contained within the same 10 digit HUC. Also, traveling south on I-65, the 10 digit HUC containing Orchard Grove also contains Cedar Lake, Lake of the Four Seasons, and Lake Dalecarlia. The different communities located within a 10 digit HUC may have unique social or economic structures, values, and needs, and the different tributaries and lakes within a 10 digit HUC may be associated with different social or economic uses and values. How can IDEM presume that this is not true without an analysis of social and economic factor? (CLC-AGL, EC)

Response: IDEM believes the enforceable activities in section 5(b)(5), as they result in environmental improvements, are environmentally beneficial and, therefore, do not need to complete the social and economic analysis component of the antidegradation demonstration. IDEM believes to comply with the CWA it is appropriate that these types activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary – they are not wholly exempt from the antidegradation requirements.

Comment: Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part D of a multi part comment follows with response provided to each part separately]:

D. The antidegradation policy requires that the lowering of water quality be socially or economically important "in the area in which the water is located." (40 CFR 131.12(b)) If the "area in which the water is located" can be smaller than the size of a 10 digit HUC, then it cannot be presumed without evidence that an increased loading of a pollutant in one "area" is socially or economically important simply because it is offset by a decreased loading in another "area," even though the two areas are located in the same 10 digit HUC. An analysis of the social and economic benefits and costs of such a trade would be required to answer the question of social

and economic importance. How can IDEM presume that an increased loading of a pollutant in one "area in which the water is located" is socially or economically important simply because it is offset by a decreased loading in another "area in which the water is located" that occurs within the same 10 digit HUC? (CLC-AGL, EC)

Response: IDEM believes the enforceable activities in section 5(b)(5), as they result in environmental improvements, are environmentally beneficial and, therefore, do not need to complete the social and economic analysis component of the antidegradation demonstration. IDEM believes to comply with the CWA it is appropriate that these types activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary – they are not wholly exempt from the antidegradation requirements. IDEM believes the 10 digit watershed is an appropriate scale to evaluate pollution trading.

Comment: Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part E of a multi part comment follows with response provided to each part separately]:

E. If the "area in which the water is located" cannot be smaller than the size of a 10 digit HUC, then one might expect, at least theoretically, that a pollution trade that results in a net decrease in the loading of the pollutant to the same 10 digit HUC may be socially or economically important. However, IDEM has never stated that "the area in which the water is located" is no smaller than a 10 digit HUC in all cases in which the trading exemptions would be applied, and such a statement does not appear to be justified. Indiana has not offered publically any information or evidence showing that pollution trades at the spatial scale of a 10 digit HUC would produce a social or economic benefit "in the area in which the water is located." Indiana cannot presume that a pollution trade would be socially or economically important at the spatial scale of a 10 digit HUC. (CLC-AGL, EC)

Response: IDEM believes the 10 digit watershed is an appropriate scale to evaluate pollution trading.

Comment: Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part F of a multi part comment follows with response provided to each part separately]:

F. How will IDEM apply this pollution trading exemption to direct discharges into Lake Michigan? Theoretically at least, this exemption would allow a significant reduction in water quality in one shore area of the Lake in exchange for increased quality in another shore area of the Lake, regardless of whether those two Lake areas intermix and without any consideration of the social or economic effects of such a tradeoff. (CLC-AGL, EC)

Response: IDEM believes the enforceable activities in section 5(b)(5), as they result in environmental improvements, are environmentally beneficial and, therefore, do not need to complete the social and economic analysis component of the antidegradation demonstration. IDEM believes to comply with the CWA it is appropriate that these types of activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary. They are not wholly exempt from the antidegradation requirements. IDEM believes the 10 digit watershed is an appropriate scale to evaluate pollution trading.

Comment: Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part G of a multi part comment follows with response provided to each part separately]:

G. The existing antidegradation rule exemption that trades a decrease in water quality for a reduction in an air pollutant expressly applies only when "the reduction in the discharge of the

air pollutant is necessary to meet a state or federal air quality standard or will substantially reduce human exposure to hazardous air pollutants." In contrast, the analogous exemption in the proposed rule's section 5(d)(2) applies when "the reduction in the loading of the air pollutant is necessary to meet a state or federal air quality standard or emission requirement, *or will substantially reduce human exposure to hazardous air pollutants or other air pollutants that are subject to state or federal air quality standards.*" The section 5(d)(2) exemption thus contains a phrase that does not appear in the analogous exemption in the existing antidegradation rules: "will substantially reduce human exposure to . . . *other air pollutants that are subject to state or federal air quality standards*." This exemption now allows a significant decrease in water quality to be traded for a decrease in any air pollutant for which there is a federal or state standard, even if the air pollutants subject to state or federal standards already meet those standards. The problem is that this exemption applies even where the traded air pollutant is meeting the standards. The question then arises: Where an air pollutant involved in the trade is meeting the applicable standards, what is the social or economic benefit (e.g., to public health) of further reductions in that air pollutant? Because the air pollutants subject to state or federal standards may already meet those standards, the social or economic benefit of further reducing those pollutants is questionable. (CLC-AGL, EC)

Response: IDEM believes the activities in section 5(d)(2), as they result in environmental improvements, are environmentally beneficial and, therefore, do not need to complete the social and economic analysis component of the antidegradation demonstration. IDEM believes to comply with the CWA it is appropriate that these types of activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading, a demonstration that the loading is necessary, and an alternatives analysis. They are not wholly exempt from the antidegradation requirements.

Comment: Based upon the foregoing background discussion of federal requirements, the antidegradation proposed rule has the following problems with its allowance of pollutant trading exemptions [Note: part H of a multi part comment follows with response provided to each part separately]:

H. By exempting such cross media trades from a social and economic analysis, Indiana is in essence claiming that such a trade is presumptively beneficial to the area in which the water is located – that is, that any lowering of any regulated air pollutant is "important economic or social development" even if the air pollutant is not toxic or hazardous and is meeting applicable standards. How can IDEM presume that, where the traded air pollutant is meeting the applicable standards, such a trade provides a social or economic benefit? Moreover, Indiana has not offered publicly any information or evidence showing that cross media pollution trades such as those covered by the proposed rule's section 5(d)(2) exemption would clearly produce a social or economic benefit "in the area in which the water is located." Without the proper showing by Indiana, EPA has no justification for approving the exemption. (CLC-AGL, EC)

Response: IDEM believes the activities in section 5(d)(2), as they result in environmental improvements, are environmentally beneficial and, therefore, do not need to complete the social and economic analysis component of the antidegradation demonstration. IDEM believes to comply with the CWA it is appropriate that these types of activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading, a demonstration that the loading is necessary, and an alternatives analysis. They are not wholly exempt from the antidegradation requirements.

Comment: The following excerpt from the January 29, 2010, letter from Linda Holst, U.S. EPA, Region 5, to IDEM in response to second notice of comment period, shows that EPA's review of the second notice draft rule found that elements of Indiana's proposed antidegradation rule appears to be inconsistent with the applicable federal requirements:

> The Federal regulations allow new or increased discharges to lower water quality in high quality waters only after the lowering of water quality is demonstrated to be necessary to accommodate important social and economic development in the area in which the waters are located. Indiana's draft rules contain exemptions from the demonstration requirements for a number of types of activities that may impact water quality. While the "exemption demonstration" in Indiana's rules might address the Federal requirement that any lowering of water quality be technologically necessary (no less degrading alternatives are available), it does not address the social and economic benefits component. To the extent that Indiana is finding, by rule, that the exempted actions are always socially and economically beneficial, Indiana must provide some factual information in the record supporting that assertion. Without such data and analysis in the record, the demonstration is incomplete and, therefore, inconsistent with the Federal regulations.
>
> Also, [selected exemptions] contemplate offsetting new or increased discharges with other actions within the same 10 digit HUC. Offsetting provisions may be an acceptable basis for determining that antidegradation review is not triggered if it is clear that the offset results in no change in water quality at the point where the new or increased discharge will occur. It is not clear that the spatial relationship between such actions will be such as to ensure that this requirement will be met in all circumstances that would qualify for this exemption.

The third noticed proposed antidegradation rule still contains the same inconsistencies with federal requirements regarding the exemptions discussed in U.S. EPA's comments and our comments concerning pollutant trading. (CLC-AGL, EC)

Response: IDEM believes the enforceable activities in section 5(b)(5) and sections 5(d)(1), and 5(d)(2), as they result in environmental improvements, are environmentally beneficial and, therefore, do not need to complete the social and economic analysis component of the antidegradation demonstration. IDEM believes to comply with the CWA it is appropriate that these types of activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary, and the activities in section 5(d)(1) and (2) must additionally submit an alternatives analysis. They are not wholly exempt from the antidegradation requirements. IDEM believes the 10 digit watershed is an appropriate scale to evaluate pollution trading.

401 Certifications

Comment: IDEM has failed to explain how antidegradation reviews will take place for CWA Section 404 permits and Section 401 certifications. IDEM has stated in comment responses that it believes that its current 401 certification process satisfies antidgradation review requirements due in part because it uses USACE guidance on 404 permitting when issuing 401 certifications. Although the 404(b) Guidelines' "avoid, minimize, and mitigate" framework, if properly applied, may provide an adequate substitute for the "alternatives analysis" part of the antidegradation review, it is not clear how the 404(b) Guidelines provide an adequate substitute for the socioeconomic review. IDEM should clarify how it intends to administer its 401 certification process to ensure that degradation is necessary to accommodate "important economic or social development in the area in which the waters are located" as required by Section 131.12(a)(2). Further, IDEM should not simply "rubber stamp" the Corps of Engineers' 404 permitting determination but should make clear that it will undertake an independent review of the alternatives analysis as well as the socioeconomic considerations implicated by activities requiring Section 401 certifications. (EC)

Response: IDEM believes the 401 water quality certification requirements, to avoid, minimize, and mitigate for impacts from loadings of fill, when applied properly, result in loadings that are not a significant lowering of water quality and, therefore, satisfy antidegradation. IDEM's 401 certification is incorporated into the USACE 404 permit.

Antidegradation Demonstration Final Determination

Comment: According to section 6(g) of the proposed rule, the commissioner will issue a final determination on an antidegradation demonstration and, if approved, incorporate that final determination into a draft permit and fact sheet available for public comment. As a final agency action, that determination will be subject to appeal when it is issued and prior to the issuance of a permit. If comments received on the draft permit result in changes to the final determination, then that determination will no longer be final and will need to be revised and reissued in final as part of the final permit. This could be simply resolved by identifying the commissioner's initial determination as a proposed determination and the final determination would be the determination issued as part of the final permit following comment. Again, if an antidegradation demonstration were only required when a new or modified discharge limit would be required, then the linkage between the permit and the antidgradation demonstration would be clearer. (IPL)

Response: Section 6(g) of the proposed rule is revised to clarify that the commissioner's determination is tentative until the final control document relative to the increased loading is issued: "When the commissioner makes a *tentative* determination on an antidegradation demonstration, the commissioner shall public notice the antidegradation demonstration *tentative* determination according to 327 IAC 5-2-11.2 and the *tentative* determination shall:

(1) summarize, in the public notice form, the determining factors relied upon by the commissioner; and

(2) if approved for an NPDES permit, be incorporated into the:

(A) draft permit; and

(B) fact sheet;

that are made available for public comment under 327 IAC 5-3-9."

Comment: The proposed antidegradation rule adds a new opportunity for an appeal at the point in the middle of an NPDES permit development process or 401 Certification process or any other process addressed by the proposed antidegradation implementation rule where a controlling document will be issued by IDEM. The proposed rule is not clear whether the commissioner's final determination on an antidegradation demonstration comes after comments from the public notice or after the appeals have been exhausted or whether this is language describing the earlier "determination" as itself being a "final determination". This problem must be eliminated. The challenge comes from informal use of language. What is happening should not be that a party is doing an "antidegradation demonstration" to IDEM any more than the party is doing an NPDES permit or a wetland certification. In all of these situations, the party is submitting information for IDEM to do the demonstration and the permit and the certification. For antidegradation, IDEM is doing the demonstration as delegated from U.S. EPA, ideally with engagement of EPA prior to its final permit decision. An incorrect antidegradation demonstration is remedied by a citizen suit against U. S. EPA under the CWA. There is no good public policy purpose to adding more points of appeal inside the state process than necessary. The process should be that for the NPDES process a party submits information that IDEM on which makes a tentative decision that is released as a draft permit and fact sheet for comments after which IDEM makes the final determination on both the permit and antidegradation demonstration. That should be the only determination. A similar process should exist for the 401 certification inside the 404 permit. There is no reason for extra appeals. Not to fix this in the proposed antidegradation rule will create inconsistencies and great inefficiencies in environmental protection in Indiana. (IEI)

Response: Section 6(g) of the proposed rule is revised to clarify that the commissioner's determination is tentative until the final control document relative to the increased loading is issued: "When the commissioner makes a *tentative* determination on an antidegradation demonstration, the commissioner shall public notice the antidegradation demonstration *tentative* determination according to 327 IAC 5-2-11.2 and the *tentative* determination shall:

(1) summarize, in the public notice form, the determining factors relied upon by the commissioner; and

(2) if approved for an NPDES permit, be incorporated into the:

(A) draft permit; and

(B) fact sheet;

that are made available for public comment under 327 IAC 5-3-9."

Variances Should Not Require Antidegradation Review

Comment: The proposed rule should be revised to provide that antidegradation review is not required for agency-approved variances. All variance applications must include a review of both the types of technology capable of treating the pollutant of concern and the social and economic costs of installing and operating each type of technology. This review is very similar to the technology review and demonstration of social or economic importance that is required for antidegradation review. In fact, the United States Environmental Protection Agency (U.S. EPA) recommends that states use the same process for reviewing social and economic impacts for variances and antidegradation review. (See: Interim Economic Guidance for Water Quality Standards Workbook, EPA 823/B-95-002 (March 1, 1995)). Thus, if IDEM has granted a variance to a discharger, it makes sense that the discharger should not also need to complete an antidegradation demonstration. A CWA Section 316(a) demonstration affirmatively satisfies antidegradation requirements; thus, no additional review beyond the demonstration that the party already has obtained the variance should be required. (AWO, NIF, IPL)

Response: IDEM does not agree that all variances should not require an antidegradation review. While some information for a variance application may be similar to the information required for an antidegradation demonstration, it cannot be assumed that it will, in all cases, automatically satisfy the antidegradation demonstration requirements. IDEM will accept the reference to the variance application information as an acceptable piece of the antidegradation demonstration and will not expect that same information to be repackaged, but supplemented, when necessary, to complete the antidegradation demonstration.

Comment: In its responses to the September 14, 2011, hearing comments, IDEM acknowledged that "316(a) variances should not be subject to antidegradation review"; however, the draft rule still excludes such variances from waters designated as ONRWs. IDEM then states that the antidegradation standard is consistent with the federal regulation. IDEM gives such variances, which are allowed by section 316(a) of the CWA, when a power company can "assure the protection and propagation of a balanced, indigenous community of shellfish, fish, and wildlife in and on the body of water into which the thermal discharge is made." If 316(a) criteria were fully met, the applicable CWA protections would be achieved, which include protecting the existing uses. The statutory scheme and legislative history indicate that limitations developed under section 316 take precedence over other requirements of the CWA and, therefore, should be exempt from antidegradation review. In view of the foregoing points, IUG continues to urge that the exception for ONRWs be deleted from the general provision of section 3(e) of the proposed rule that a determination approving alternative thermal effluent limits under Section 316(a) shall be deemed to be consistent with the rule's antidegradation standards. (IUG)

Response: The antidegradation standard is consistent with federal regulation which only allows for temporary reductions in water quality in Outstanding National Resource Waters – see 40 CFR § 131.12(a)(3).

Mercury

Comment: The proposed rule contains provisions for addressing new or increased discharges of mercury. However, Indiana already has a streamlined mercury variance procedure that provides a comprehensive method of addressing mercury discharge issues. IPL believes imposing the proposed antidegradation requirements in addition to the streamlined mercury variance mechanism is unnecessary and will prove to be unworkable. Therefore, IPL proposes that the antidegradation rule be revised to exclude new or increased discharges of mercury that are subject to a variance from the antidegradation requirements. (IPL)

Response: IDEM does not agree that all streamlined mercury variance applications should not require an antidegradation review. While some information for the streamlined mercury variance application may be similar to the information required for an antidegradation demonstration, it cannot be assumed that it will, in all cases, automatically satisfy the antidegradation demonstration requirements. IDEM will accept the reference to the variance application information as an acceptable piece of the antidegradation demonstration and will not expect that same information to be repackaged, but supplemented, when necessary, to complete the antidegradation demonstration.

Comment: The existing Indiana antidegradation rules prohibit absolutely any new or increased load of any BCC into waters of Great Lakes Basin. This is stricter than federal law. Federal guidance for BCCs into the Great Lakes Basin is not to prohibit new or increased discharge but to require justification of why a BCC could not be substituted for by a nonBCC. Mercury is listed as a BCC, but it is present in source water. All Indiana water sources contain mercury at some concentration. To declare an absolute prohibition of any new or increased load means an absolute prohibition of any new or increased discharge of water. The proposed rule removes the BCC discharge prohibition for new mercury loading in OSRW of Great Lakes Basin while keeping the prohibition for other BCCs. It eliminates the prohibition of discharge for mercury in other waters of the Great Lakes Basin by eliminating altogether the prohibition of new BCC discharges to those waters. However, it does not complete the solution by specifying that an antidegradation review for a BCC into the Great Lakes should include consideration of substituting a nonBCC for any BCC increase in effluent other than that BCC from source water. Any antidegradation policy for mercury does not negate that already aggressive provisions in the NPDES permit limit system to address mercury whatever the source to protect surface water quality to the water quality standard appropriate for the waterbody. That policy is so aggressive that in order to comply most POTWs need a variance with its own restrictive requirements to find and address mercury. (IEI)

Response: IDEM believes that the antidegradation demonstration requirements in 327 IAC 2-1.3-5 (c) which ask for the "availability, reliability, cost-effectiveness, and technical feasibility of no degradation; minimal degradation; and degradation mitigation techniques or alternatives" include consideration of substituting a non-BCC for any BCC increase in effluent other than that BCC from source water.

Comment: The antidegradation proposed rule explicitly excludes mercury from consideration as a BCC from two parts of the BCC antidegradation policy concerning: (1) temporary mercury discharges into OSRW Great Lakes Basin without antidegradation review under 327 IAC 2-1.3-4(a); and (2) permanent increases of mercury loading into OSRW Great Lakes Basin allowance with antidegradation review. For purposes of other regulatory provisions under the antideg proposed rule, mercury remains as a BCC because the rule:

- voids the exemption from antidegradation review for expanded POTW due to increasing sewer area et al if there is "no increased loading of BCCs from nondomestic wastes" because there is trace concentrations of the BCC mercury is in all surface and ground water (327 IAC 2-1.3-4(c)(D)(iv)).

- voids the exemption from antidegradation review for noncontact cooling water if there is "increase the loading of BCC" because there is trace concentration of the BCC mercury in all surface and ground water (327 IAC 2-1.3-5(b)(3)(B)).
- eliminates any significant lowering threshold for any new or increased NPDES permitted discharger to any water in the state when there is proposed an increase in water discharge; therefore, all dischargers increasing water will be required to perform mercury antidegradation review even if not significantly lowering water quality for other loading of permitted parameters.

(this would also apply to nonNPDES permit limit loadings such as indirect discharger and storm water flows as well but there is no procedure to establish de minimis for nonNPDES permit limit loadings in the first place) (IEI)

Response: Mercury is a BCC by definition. IDEM believes it is appropriate to recognize the ubiquitous nature of the BCC, mercury in the antidegradation standards and some exemptions. Any new or increased loading of a BCC, including mercury, is a significant lowering of water quality requiring some level of an antidegradation demonstration unless it is an exempt, short-term, temporary loading or a parameter already limited in a permit (Sec. 4(c)(2)). IDEM believes the exemption in 327 IAC 2-1.3-4(c)(D)(iv), when read in its entirety, could apply to an increased loading that may contain mercury because the exemption addresses domestic wastes and IDEM acknowledges that there may be trace amounts of mercury in domestic wastes. As noted in 327 IAC 2-1.3-5(b)(3)(B), increased loadings of noncontact cooling water that also increase the loading of a BCC, including mercury, would be required to do a more extensive antidegradation demonstration. Antidegradation review is triggered by an increased loading. Trace amounts added to trace amounts does not constitute an increased loading.

Comment: With regard to mercury and section 5(c)(4) concerning the availability, cost-effectiveness, and technical feasibility of discharging to another waterbody, mercury is a ubiquitous element in all surface and ground water with no de minimis for any increase, and an antidegradation review will be required for any point or nonpoint source increase in water added to a federal jurisdictional surface water. Therefore, this provision to explore putting the water into another water body will be triggered regularly. That means a standard section 5 policy will need to be developed about what is higher and lower assimilative capacity for trace mercury between waterbodies and how that is to be measured. (IEI)

Response: The intent of this component of the necessary information is for a person proposing a new or increased loading consider the impact of options regarding the location of the new or increased loading.

Exempt Discharges

Comment: The language of "short-term, temporary, new or increased discharges" in section 4(a) and 4(b) of the proposed rule is incorrect. What is meant is "new or increased discharges that are both short-term and temporary". The language as written eliminates the requirement for short-term and temporary. A list of modifiers connected by "or" means that each modifier can act independently to give the sentence meaning. Thus, the IDEM proposed rule means each of four different things:

- An exemption from antidegradation review is allowed for all short-term discharges of mercury and nonBCCs.
- An exemption from antidegradation review is allowed for all temporary discharges of mercury and nonBCCs.
- An exemption from antidegradation review is allowed for all new discharges of mercury and nonBCCs.

- An exemption from antidegradation review is allowed for all increased discharges of mercury and nonBCCs.

Obviously, none of these statements is meant to be true. Allowing an exemption from antidegradation for either a new or increased discharge of mercury and nonBCCs makes no sense unless the discharge is both temporary and short-term. This is not an "or" situation. "New or increased" is a phrase together. It must be conditioned by the phrase "both temporary and short-term" in order to have the meaning intended. Therefore, the correct way to word both sections 4(a) and 4(b) is: "an exemption from the antidegradation demonstration requirements included in sections 5 and 7 of this rule shall be allowed for new or increased discharges of mercury and nonBCCs that are both temporary and short-term". (IEI)

Response: The proposed rule is revised to clarify this language.

Comment: Increased loading from certain noncontact cooling water discharges, discharges of IDEM approved non-BCC water treatment additives, discharges with enforceable individual NPDES permits for storm water associated with industrial activities, discharges associated with reductions in air pollution, and discharges associated with remediations (covered under section 5(b)(3), section 5(b)(4), section 5(b)(1)(B), section 5(d)(2), and section 5(b)(2)) should be excluded from the antidegradation implementation requirements because they either have minimal impacts on the waterbody, already have been reviewed and approved by IDEM's Office of Water Quality (such as for water treatment additives), or clearly are associated with activities that will improve the environment. Requiring an antidegradation demonstration for these discharges, even a limited demonstration, is unnecessary and unduly burdensome. This is particularly true for noncontact cooling water discharges and discharges associated with remediation because to not exempt them from the demonstration requirements would be inconsistent with the approach taken by the majority of other Region 5 states. (IPL, FA)

Response: IDEM believes to comply with the CWA it is appropriate that the section 5(b) activities, which have loadings that result in a significant lowering of water quality, submit basic information on the nature and location of the proposed loading and a demonstration that the loading is necessary, and the activities in section 5(d) additionally submit an alternatives analysis.

Change to the BCC Policy

Comment: The federal government requires all new BCC loadings to the Great Lakes Basin be given special antidegradation consideration, namely that it should be reviewed whether the purpose for the addition of a BCC could be achieved by a nonBCC. The existing Indiana rule chose not to have that special antidegradation review but, instead, contains an absolute prohibition of any increase in loading of a BCC. The proposed rule eliminates the prohibition of new BCC discharges in the Great Lakes Basin except for those BCCs loaded into OSRW in the Great Lakes Basin at a level to cause a "significant lowering of water quality." The proposed rule then in section 4(c) excludes BCC from the calculation of an NPDES permit limit the measure of significant lowering of water quality. That means that the "significant lowering" condition is moot; there is no de minimis procedure in the rule for BCC. Finally, the demonstration language in the proposed rule itself has no special provisions for BCC evaluation, such as can a discharger achieve the same objective by using a nonBCC material. Therefore, the revised rule:

- allows BCC loading into Great Lakes Basin other than OSRW;
- effectively prohibits all loading of BCC other than mercury into OSRW in the Great Lakes Basin;
- requires all new loadings of BCC to any federal jurisdictional surface waters in the state to undergo antidegradation review without de minimis; and

- has no antidegradation procedure specific for replacing the load of a proposed increase of a BCC with a nonBCC.

(IEI)

Response: True, the disallowance of the application of de minimis on BCCs concludes that loadings of BCCs result in a significant lowering of water quality and, therefore, an antidegradation demonstration is required (unless the loading is the result of an exempt activity listed in section 4(c)(2)). Therefore, with an adequate antidegradation demonstration, loadings of BCCs into Great Lake Basin HQWs that are not OSRWs may be allowed. Loadings of BCCs, except mercury, into Great Lake Basin HQWs that are OSRWs are not allowed (unless the loading is the result of an exempt activity listed in section 4(c)(2)). IDEM believes that the antidegradation demonstration requirements in 327 IAC 2-1.3-5 (c), which ask for the "availability, reliability, cost-effectiveness, and technical feasibility of no degradation; minimal degradation; and degradation mitigation techniques or alternatives", include consideration of substituting a non-BCC for any BCC increase in effluent other than that BCC from source water.

Comment: The existing antidegradation rule at 327 IAC 5-1-113(b)(1) for the Great Lakes Basin has a special consideration for BCCs in permitted discharges, including NPDES permitted activities plus "other deliberate activities that, based on the information available, could reasonably be expected to result in an increased loading of any BCC to any waters of the Great Lakes." The regulatory control of BCC was established and justified by U.S. EPA because it claimed that the Great Lakes Basin was vulnerable to harm from BCCs in a way that free-flowing water systems such as the Mississippi Basin were not. It made the scientific argument that the characteristics are unique to the specific aquatic systems of the Great Lakes and the hydrologic flow of the Great Lakes (bath tub with long retention times). The mathematical algorithm for BCC was for the Great Lakes bioaccumulation characteristics of the aquatic system assuming hydrologics of Great Lakes. The proposed rule makes the scientific assumption that for Indiana, the rivers, streams, and lakes have the same retention as the Great Lakes and the same or equivalent bioaccumulation characteristics of the Great Lakes, counter to the U.S. EPA technical argument. It may well be that certain waters need special protection from new discharge of the Great Lakes BCCs because the Mississippi Basin aquatic fish chains are similar with respect to bioaccumulation and fish consumption patterns or it may not be the case. (IEI)

Response: IDEM believes it is appropriate to disallow loadings of BCCs, except mercury, that cause a significant lowering of water quality into Great Lake Basin HQWs that are OSRWs (unless the loading is the result of an exempt activity listed in section 4(c)(2)). Increased loadings of mercury into Great Lake Basin HQWs that are OSRWs and increased loadings of BCCs into all other HQWs may be allowed if the antidegradation standards are met.

10% of Available Loading Capacity

Comment: IUG welcomes the clarification provided by IDEM that "the available loading capacity shall be established at the time of each request for a new or increased loading of a regulated pollutant." (IUG)

Response: IDEM appreciates the recognition that IDEM did make rule language changes based on comments received.

Comment: The proposed antidegradation rule creates ambiguity for the application of available loading capacity at 327 IAC 2-1.3-4(c)(1) whereas the existing rule at 327 IAC 5-2-11.3 is more complete and unambiguous in its explanation. The concept of "available loading capacity" is critical to this proposed rule to determine whether a "new or increased loading" is sufficient to cause a "significant lowering of water quality" and, therefore, would require an adequate justification by an "antidegradation demonstration" to allow. The available loading capacity is used to set the de minimis loading. As defined and as used in this proposed rule, the available loading capacity term is restricted to a parameter that both: (1) is regulated by a

specific water quality standard and stream design flow enforceable as a point source under an NPDES permit limit; and (2) is a non-BCC. Situations of new or increased loading other than those with new or increased NPDES permit limit do not have an " available loading capacity" as defined by the rule and, therefore, have no de minimis increase. Any increase of any magnitude other than the permit limit automatically requires an antidegradation demonstration. The proposed rule changes the use of the available loading capacity compared to the existing regulation and adds the concept of cumulative loading. (IEI)

Response: IDEM believes the definition of available loading capacity, when taken in context of the relative definition of total loading capacity and used loading capacity, is unambiguous and appropriate: **"**Available loading capacity" is expressed as a regulated pollutant mass loading rate per twenty-four (24) hour period, for the waterbody in that area where the water quality is proposed to be lowered, and means the difference between the total loading capacity and the used loading capacity.

"Total loading capacity", is expressed as a regulated pollutant mass loading rate per twenty-four (24) hour period, for the waterbody in the area where the water quality is proposed to be lowered, and means the product of the applicable water quality criterion multiplied by the sum of:

(A) the existing effluent flow;

(B) the proposed new or increased effluent flow; and

(C) either:

(i) the approved alternate mixing zone volume for Lake Michigan; or

(ii) the stream design flow.

"Used loading capacity" is expressed as a regulated pollutant mass loading rate per twenty-four (24) hour period, for the waterbody in the area where the water quality is proposed to be lowered, and means the sum of:

(A) the representative background loading rate over a twenty-four (24) hour period; and

(B) the monthly average mass based effluent limitations contained in the existing permit.

Comment: A formula for a theoretical antidegradation "available loading capacity" for consideration <u>of a new or increased NPDES permit limit</u> is defined in the proposed regulation (327 IAC 2-1.3-2(2)). It is used by the regulation at 327 IAC 2-1.3-4(c)(1) to calculate whether a threshold for a "significant lowering of water quality" is being proposed to be exceeded by the new or increased NPDES permit limit and thus requiring an antidegradation review to justify the new permit condition. Unfortunately, the language describing the components to be used for the available loading capacity when it is used in the significant lowering determination is ambiguous. If this is not clarified, legal disputes could arise as either the regulated or environmental advocates challenge an IDEM interpretation or that IDEM staff interpretation varies over time. The solution is to write a complete unambiguous mathematical formula as is done elsewhere in the current rule. (IEI)

Response: IDEM believes the definition of available loading capacity, when taken in context of the relative definition of total loading capacity and used loading capacity, is unambiguous and appropriate: **"**Available loading capacity" is expressed as a regulated pollutant mass loading rate per twenty-four (24) hour period, for the waterbody in that area where the water quality is proposed to be lowered, and means the difference between the total loading capacity and the used loading capacity.

"Total loading capacity", is expressed as a regulated pollutant mass loading rate per twenty-four (24) hour period, for the waterbody in the area where the water quality is proposed to be lowered, and means the product of the applicable water quality criterion multiplied by the sum of:

(A) the existing effluent flow

(B) the proposed new or increased effluent flow; and

(C) either:

(i) the approved alternate mixing zone volume for Lake Michigan; or

(ii) the stream design flow.

"Used loading capacity" is expressed as a regulated pollutant mass loading rate per twenty-four (24) hour period, for the waterbody in the area where the water quality is proposed to be lowered, and means the sum of:

(A) the representative background loading rate over a twenty-four (24) hour period; and

(B) the monthly average mass based effluent limitations contained in the existing permit.

Diminimis/Cumulative Cap

Comment: The proposed rule includes de minimis/cumulative cap provisions for HQWs that are significantly different and greatly more stringent than the current provisions in the implementation procedures for the Great Lakes system, 327 IAC 5-2-11.3 (current rule). The current rule defines the de minimis/cumulative cap based upon unused loading capacity and total loading capacity. Specifically, under the current rule, if, as a result of a deliberate activity, a discharger requests a new permit limit or modified permit limit and the increased limit (as mass) is less than 10 percent of the unused loading capacity and at least 10 percent of the total loading capacity (TLC) remains unused after the increase, then the increase is considered a de minimis lowering of water quality. Thus, the activity and modified or new permit limit is not subject to the antidegradation demonstration requirements. The current rule establishes a clear threshold based on the capacity that, cumulatively, ever could be allocated to effluent mass increases as 10 percent of TLC has to remain unused. That is, as multiple requests or multiple dischargers request small increases to discharge limits, the cumulative cap is:

90% TLC – Background Level = Cumulative Effluent Cap

As the TLC is based upon water quality criterion and the applicable stream design flow, the mass to remain unused is constant unless effluent load or background load changes dramatically.

In contrast to the current rule, the proposed rule defines the de minimis/cumulative cap based on only unused loading capacity. As in the current rule, for HQWs the de minimis increase to a limit (or to a new limit) has to be less than or equal to 10 percent of the existing unused loading capacity, determined at the time of the specific proposed new or increased loading of the pollutant of concern. However, the Benchmark of 90% of unused loading capacity is too restrictive.

IDEM has not presented data or information to show that the current de minimis/cumulative cap provisions are not satisfactory for managing antidegradation standard requirements with respect to minor increases to permit limits. In fact, the application of the cumulative cap and the definition of that cap in the current rule is appropriate and justifiable. (AWO, IPL, FA)

Response: IDEM believes that it is appropriate to establish a benchmark available loading capacity equal to 90% (which translates to a cumulative cap of ten percent) of the available loading capacity at the time of the first request to lower water quality in a high quality water. IDEM does not believe that any less restrictive alternative would be approved by U.S. EPA.

Comment: The proposed rule at 327 IAC 2-1.3-4(c)(1)(A)(ii) and (iii) includes a concept of a "benchmark available loading capacity" that is much more stringent than what is required by IC 13-18-3-2 and federal regulation. The EPA has approved other states' regulations with no such cap, and we encourage IDEM to remove this section from the rule. If IDEM insists on including section 4(c)(1)(A)(ii) and (iii), then it should be revised to include a reasonable benchmark loading capacity (for example, 50% of the available unused loading capacity). Ensuring that de minimis permitted increases do not reduce the unused loading capacity of the

stream below 50% will provide more than enough buffer to ensure protection of existing use designations and to ensure that a significant lowering of water quality does not occur. (IChC, ISEG, FA)

Response: IDEM believes that it is appropriate to establish a benchmark available loading capacity equal to 90% (which translates to a cumulative cap of ten percent) of the available loading capacity at the time of the first request to lower water quality in a high quality water. IDEM does not believe that any less restrictive alternative would be approved by U.S. EPA.

Comment: 327 IAC 2-1.3-4(c)(1)(A)(ii) should be revised to read as follows including the underlined language as an addition to the proposed rule language:

> (ii) The benchmark available loading capacity is equal to ~~ninety~~ fifty percent ~~(90%)~~ (50%) of the available loading capacity established at the time of the request for the initial increase in the loading of a regulated pollutant, except that if there is a subsequent, permanent decrease in discharges to that waterbody, the commissioner shall adjust the benchmark available loading capacity to reflect the corresponding increase in available loading capacity.

(FA)

Response: IDEM believes that it is appropriate to establish a benchmark available loading capacity equal to 90% (which translates to a cumulative cap of ten percent) of the available loading capacity at the time of the first request to lower water quality in a high quality water. IDEM does not believe that any less restrictive alternative would be approved by U.S. EPA.

Comment: The de minimis allowance of 10 percent of unused loading capacity should be established as the default allowance, and the proposed rule should clarify that simple loading capacity calculations will be sufficient to demonstrate that a discharger qualifies under the de minimis provisions. The proposed rule language is problematic especially for metals in receiving streams that have elevated levels of total suspended solids. The current test methods used for detection of metals often involves total metals and the lab method requiring acid digestion and then metal extraction, which overstates metal concentrations significantly. These total suspended solids (dirt particles) have trace metals that are bound in the particle and are not biologically available. In fact, data that IDEM would use to make a determination would suggest that the metal load in the Ohio River is so high that the river is sterile. This is obviously not the case as there is a great deal of fish in the river as noted in Alcoa's recent 316(b) report submitted to IDEM. Having this type of a strict "Benchmark" would essentially state that no storm water would be permitted to enter a great number of receiving streams including the Ohio River so all new discharge permits would have to go through the stringent antidegradation demonstration to discharge into a receiving stream that is clearly not impacted. Based on this possibility, has IDEM even determined if there are concerns associated with the "Benchmark" set at 90%? It should be incumbent on IDEM, prior to rule promulgation, to actually review the rule's potential complication because this rule could severely restrict any new business growth and make it so that IDEM is unable to actually issue the current permits especially with the trigger as currently written. Therefore, the cap should be returned to the original cap as written into the Great Lakes Rule. (AWO)

Response: IDEM believes that it is appropriate to establish a benchmark available loading capacity equal to 90% (which translates to a cumulative cap of ten percent) of the available loading capacity at the time of the first request to lower water quality in a high quality water. IDEM does not believe that any less restrictive alternative would be approved by U.S. EPA. IDEM anticipates that most stormwater discharges will be permitted under a general permit that has a completed, adequate antidegradation demonstration.

Comment: State law adopted by the 2009 General Assembly requires a de minimis for all situations for which antidegradation is implemented. The General Assembly assumed that antidegradation implantation[*sic*] procedures in Indiana regulation are for NPDES permit situations. See IC 13-18-3-2(q) and (r) with reference to IC 13-18-3-2(l)(1). The law does not

specify what de minimis should be. There are many ways to do it. But state law requires that there be a de minimis for all pollutants and situations for which antidegradation is applied. However, the way the proposed antidegradation rule is constructed means the loading for anything other than an NPDES permit limit increase of a nonBCC has no de minimis. Any loading no matter how infinitesimal it is, or its impact is, is subject to the conditions of this implementation regulation. The applicability sentence does end with a phrase stating that included in this new broad scope are "change in process or operation that will result in a significant lowering of water quality" but that phrase is unnecessary and adds no new information. Of course, any loading from a specific action causing significant lowering is covered if every activity with a loading of any amount at all is covered. (IEI)

Response: IC 13-18-3-2-(l)(1) says: "The [antidegradation] procedures provided by rule under subsection (k) must include the following:

(1) A definition of significant lowering of water quality that includes a de minimis quantity of additional pollutant load:

(A) for which a new or increased permit limit is required; and

(B) below which antidegradation implementation procedures do not apply."

IDEM believes the statute does not limit the antidegradation implementation procedures to new or increased permit limits, but requires a provision for some de minimis (undefined by the statute) when a new or increased permit limit is required.

Comment: The proposed antidegradation rule provides no de minimis for significant lowering of water quality for increases other than a new or increased nonBCC NPDES permit limit. State law at IC 13-18-3-2(q) and (r) with reference to (l)(1) requires that there be a procedure to assign a de minimis for antidegradation. Wetland filling, stream bank cutting, harbor dredging, increase in existing effluent concentration from an indirect discharger, increase in existing effluent concentration of an NPDES discharger of parameters too low in concentration to need a permit limit, storm water increase outside the parameters with an NPDES effluent limit all will now be illegal without first an antidegradation review no matter how small the increase in loading to a federal jurisdictional water. (For nonjurisdictional waters of the state it is possible for IDEM to develop its own significant lowering threshold because those waters are not regulated by the implementation provisions of this proposed regulation.) The threshold is related to a "request." This is consistent with a request for new or increased NPDES permit limit but leaves ambiguous the situations of increased in loading of applicability 327 IAC 2-1.3-1(b) for which there is no "request" such as increase in loading of trace existing effluent concentrations that occurs during the course of business or storm water occurrence. Moreover, there are substances with NPDES permit limits without water quality criteria and thus no way to establish an available loading capacity for the Section 4(c) significant lowering of water quality determination. State law requires a de minimis procedure. (IEI)

Response: Though statute requires some inclusion of a de minimis (but the de minimis is undefined by statute), IDEM does not believe the statute necessitates a provision for a de minimis for everything. For example, IDEM does not believe it is appropriate to allow de minimis loadings of BCCs. The implementation procedures apply to waters of the state which include both jurisdictional and non-jurisdictional waters.

Comment: Baseline loading capacity as established in the proposed rule does not allow IDEM to adjust this determination in response to a permanent reduction in discharges to a waterbody. The proposed rule should be modified to grant IDEM the ability to adjust baseline loading capacity under such circumstances. (NIF, IChC, ISEG, IPL, FA)

Response: The proposed rule includes a benchmark loading capacity for use in determining de minimis loadings. This benchmark, or baseline, is set to protect water quality from cumulative impacts of multiple de minimis loadings, and IDEM does not believe it is appropriate to adjust the benchmark after it is established. However, changes in flow and loading, including a permanent reduction in discharges, are accounted for when calculating

available loading capacity. If the reduction in discharges results in increased loading capacity, any subsequent proposal for a de minimis increase should result in a remaining available loading capacity that is greater than or equal to the benchmark loading capacity therefore satisfying the de minimis exemption requirements.

Comment: IDEM's response to comments has helped clarify the concept of de minimis discharges to lakes. According to IDEM's responses, it is now understood that an increase loading to an Indiana lake can be considered de minimis only in cases where an alternative mixing zone has been established. IDEM responded, "[a] discharge to a lake that does not have an approved alternate mixing zone does not have any available loading capacity" and "[a]ny discharger without a pre-existing alternate mixing zone that proposes a new or increased discharge will be required to submit an antidegradation demonstration." Concern remains, however, with the method that IDEM will use to calculate the available loading capacity of rivers and streams, particularly, about IDEM's proposed use of additional wastewater discharge flow in the calculation of the loading capacity of a receiving water. How does IDEM intend to treat a situation where process water is withdrawn upstream of the discharge point and then returned to the river in the effluent stream: Under such a circumstance, there is no water added to the river when the effluent is discharged so it does not make sense to include the volume of effluent when calculating loading capacity. A similar situation is present where the discharger takes clean ground water that had been reducing pollution concentration in the receiving waterbody. IDEM should clarify for the record how it intends to calculate total loading capacity in these situations. (EC)

Response: IDEM will only count actual additional flow in calculations of de minimis.

De minimis Increases in Heat

Comment: Section 4(c)(1)(B) of the proposed rule identifies de minimis increases in heat to waterbodies other than Lake Michigan as new or increased discharges that do not result in an increase in temperature outside of a designated mixing zone and will not result in an increase in waste heat at an amount greater than the amount required to raise the temperature of the stream design flow of the receiving steam by 1 degree Fahrenheit. In some cases, neither the current NPDES permit nor the associated fact sheet identifies a designated mixing zone for heat. In all cases where a mixing zone has been allowed even if it has not been included in the current NPDES permit or the associated fact sheet, that mixing zone should be considered the designated mixing zone for purposes of this condition. Also, IDEM has not identified any basis for the 1 degree Fahrenheit limitation. 327 IAC 2-1-6(b)(4)(C) identifies a maximum of 5 degree Fahrenheit and 3 degree Fahrenheit increases above the natural temperature for streams and lakes and reservoirs respectively as the water quality standard. IDEM should provide a justification for imposing a 1 degree Fahrenheit limitation as de minimis in place of some higher temperature increase for review and comment by the regulated community and the public prior to finalizing this proposed rule. (IPL)

Response: IDEM believes the 1 degree Fahrenheit limitation as de minimis is appropriate as it allows for some increase that is de minimis that does not use up all of the 3 or 5 degree increase allowed by the water quality standards. Note that 10% of 3 degrees is 0.3 degrees, and IDEM agrees that the variation in the measurement of temperature makes a 0.3 degree de minimis meaningless.

Social or Economic Importance

Comment: In its responses to the September 14, 2011, hearing comments, IDEM stated that the language of the statute suggests that "Inclusion by the applicant of additional factors that may enhance the social or economic importance associated with the proposed discharge, such as an approval that recognizes social or economic importance and is given to the applicant by: (1) a legislative body; or (2) other governmental officials" should satisfy IUG that its members may

assert a regional economic impact if it chose to do so. IUG responds by suggesting that, since IDEM recognizes that regional impacts can be considered, the rule should expressly state this, especially given that this factor is likely to arise with some frequency. This is important to the electric utility industry as power plants located in one locality regularly may benefit those living in a more distant locality. IUG continues to press the importance of addressing this issue in the rule with the addition of a new clause be included in section 5(g)(5) of the proposed rule to read as follows:

> Regional or statewide social or economic impacts of the activity associated with the proposed discharge.

(IUG)

Response: The economic and social factors listed for evaluation, where relevant, in an antidegradation demonstration are those identified in statute at IC 13-18-3-2 (s). IDEM does not believe it is appropriate to add or subtract from the list defined by the legislature. Again, IDEM believes that the factor, found in the proposed rule at section 5(g)(5)(P) (inclusion by the applicant of additional factors that may enhance the social or economic importance associated with the proposed discharge, such as an approval that recognizes social or economic importance and is given to the applicant by: (i) a legislative body; or (ii) other government officials) allows for the inclusion of information on regional and state level impacts.

CAFO General Permit

Comment: IDEM's second notice comment responses addressed the concerns of the agricultural community concerning non-discharging facilities with an NPDES permit by saying, "[i]f a CAFO general permit does not allow for a discharge, then the CAFO general permit does meet the non-degradation standard.". We agree with this interpretation, assuming this same analysis extends beyond the soon to be defunct CAFO general permit to include individual NPDES permits for CAFOs as well. The concern with this interpretation for non-dischargers is that it seems contradictory with respect to the references to nonpoint sources in the proposed rule. If the absence of a discharge requiring an NPDES permit automatically meets the non-degradation standard, there is no need to mention nonpoint sources in the rule. Not only does the reference appear to run counter to IDEM's interpretation, it is questionable how nonpoint sources could be regulated under this rule based upon the lack of CWA authority. As a result, the language at 327 IAC 2-1.3-3(a)(1)(B) referencing controls on nonpoint sources should be removed because if it is IDEM's position that the antidegradation rule does not apply to nonpoint source activities exempt from CWA regulation, then this rule should not reference establishing controls on nonpoint sources. This is not to say that the agricultural community does not believe that limiting pollution from nonpint sources is not an important tool in protecting the environment. However, it does mean that existing authorities must be followed and that efforts outside of controls on point sources should not be a part of this rule. (IP-FB)

Response: Any permit that does not allow for a discharge meets the non-degradation standard. The antidegradation standards continue to incorporate the CWA language that, to ensure the standards are met the commissioner shall "Establish controls as necessary on nonpoint sources, *where authority exists*…."

Administratively Issued General Permits

Comment: From IDEM's comment responses, it is understood that any Notice of Intent that satisfies the general permit requirements of an administratively issued general permit that satisfies the antidegradation requirements will also satisfy the antidegradation requirements. In order to provide appropriate clarification to the casual reader with regard to the preparation of an antidegradation demonstration as provided under 327 IAC 2-1.3-5(b) and the role of the exemptions, the following underlined language should be added to section 5(b):

5(b) An antidegradation demonstration, not exempt under section 4 of this rule, that includes the basic information....

(ICC)

Response: The proposed rule language in subsections 5(b) and 5(d) is revised to say: "Any person requesting a new or increased loading that would cause a lowering of water quality that is not exempt under section 4 of this rule must submit an antidegradation demonstration that includes…."

Comment: There has been extensive discussion in the stakeholder process of ways to reconcile general permits with case-specific antidgradation review. In particular, discussion focused on: (1) U.S. EPA's concern that activities covered by general permits are not given a "blanket exemption" (January 2010 letter); (2) how IDEM intends to avoid cumulative degradation resulting from the use of general permits; and (3) how IDEM will exercise independent review and require an individual permit when necessary to avoid significant cumulative degradation. The Environmental Coalition submitted detailed comments on these general permit issues in response to IDEM's second notice draft rule. Unfortunately, the third notice proposed rule does not provide much additional guidance or clarification of how the rule will be implemented. Our position is that IDEM's antidegradation review of NPDES general permits as set forth in section 1(c)(1) of the proposed rule should lead to conditions in the general permits to ensure that:

1. The applicant's Notice of Intent (NOI) contains sufficient information for IDEM to determine the magnitude of the proposed lowering of water quality.
2. There is adequate public notice and access to the information contained in the NOIs.
3. Any water quality lowering resulting from the use of the general permit has been determined to either be "insignificant" or "necessary to accommodate important social or economic development" on an individualized basis.
4. General permits will not be used if they would have the effect of lowering water quality in OSRWs or ONRWs.
5. An individual permit will be required if the project would lead to significant degradation on an individual or cumulative basis.

Confirmation of these stated factors is needed to avoid the need for further clarification and discussion with EPA before the rule is approvable at final hearing. (EC)

Response: IDEM will follow appropriate rules in developing an antidegradation review of its general permits.

Narrative Criteria

Comment: The term "narrative criteria" continues to leave unanswered the question as to how narrative criteria will be applied. The proposed rule should provide that a regulated pollutant is any numerically expressed parameter for which water quality criteria have been adopted. IDEM has responded to comments by stating that it understands that narrative criteria will not be used in calculating degradation under de minimis; therefore, IDEM should conclude that the de minimis exercise is unnecessarily complex as evidenced by the awkward narrative criteria application discussion. IDEM needs to clarify the use of numerically expressed narrative criteria only and eliminate the de minimis exercise entirely. (ICC, IUG)

Response: IC 13-18-3-2-(l)(1) says: "The [antidegradation] procedures provided by rule under subsection (k) must include the following:

(1) A definition of significant lowering of water quality that includes a de minimis quantity of additional pollutant load:

(A) for which a new or increased permit limit is required; and

(B) below which antidegradation implementation procedures do not apply."

Therefore, some de minimis is required. De minimis lowering will be determined for narrative criteria that can be translated into a numeric water quality value.

Comment: IDEM's comment responses have stated that U.S. EPA and surrounding states have included narrative criteria and, therefore, so should Indiana. IUG supports such inclusion but asserts that it is entirely unreasonable for IDEM not to qualify the rule such that it will apply only to those narrative criteria for which a numeric value has been developed to represent its expression or implementation. This will allow objective implementation of such criteria in this context, including implementation of the concept of de minimis lowering of water quality. This is issue is so germane to the entire implementation procedures it is too important an issue to be left unstated for subsequent treatment only in guidance. In addition to the main concern about the manner in which a narrative criterion may be the basis of a "regulated pollutant", the proposed definition contains an organizational awkwardness in which criteria and pollutants are lumped together inappropriately.

The definition of "regulated pollutant" should be revised to read as follows:

(44) "Regulated pollutant" means ~~any~~:

(A) any parameter, substance, or other constituent or characteristic of a pollutant, as defined in subdivision (39):

(i) for which water quality criteria have been adopted in or developed pursuant to 327 IAC 2-1 or 327 IAC 2-1.5;

~~(ii)~~ (AA) including ~~(AA)~~ narrative and numeric criteria; and

(BB) excluding biological criteria; ~~nutrients, specifically phosphorus and nitrogen; and~~

(ii) including nutrients, specifically phosphorus and nitrogen; and

(iii) excluding:

(AA) ~~biological criteria~~ pH; and

(BB) dissolved oxygen ~~pH~~; and

~~(CC) dissolved oxygen; and~~

(B) any other parameter, substance, or other constituent or characteristic of a pollutant, as defined in subdivision (39), that may be limited in an NPDES permit as a result of, but not limited to:

(i) best professional judgment;

(ii) new source performance standards;

(iii) best conventional pollutant control technology;

(iv) best available technology economically achievable; or

(v) best practicable control technology currently available;

for the appropriate categorical guidelines of 40 CFR 400 to 40 CFR 471;

(C) regardless of paragraph (A) of this definition, a "regulated pollutant" may not include or be based on a narrative water quality criterion unless a numeric value subject to reproducible, objective measurement has been established, through rulemaking, for a parameter, substance or other constituent or characteristic of a pollutant to express or implement the narrative criterion.

(IUG)

Response: IDEM believes it is appropriate to include narrative criteria in the definition of regulated pollutant because there are pollutants that do not currently have a numeric water quality standard that do merit regulatory review. Additionally, US EPA has voiced concern that implementation procedures should address in some manner the need to protect water quality for those substances for which numeric criteria do not exist. In comments submitted by EPA region 7 to Missouri in March 2008, EPA said "EPA… requests that Missouri clarify with its submission that the current definition of "pollutants of concern" is not limited to just those pollutants with numeric criteria, but also includes other pollutants covered by the state's narrative criteria that have the potential to degrade water quality." IDEM recognizes that narrative water quality criteria cannot be used to establish a de minimis lowering of water quality because a numeric value is necessary to develop the available loading capacity. Though statute

requires some inclusion of a de minimis (but de minimis is undefined by statute), IDEM does not believe the statute necessitates a provision for a de minimis for everything. For example, IDEM does not believe it is appropriate to allow de minimis discharges of BCCs.

Comment: IPL recommends that the proposed rule identify a de minimis level for all regulated pollutants or provide an option for the discharger to demonstrate that its new or increased discharge will not significantly impact the waterbody. This is particularly important for pollutants that may only be associated with narrative water quality criteria. Alternatively, the definition of regulated pollutant could be revised to only include pollutants that have a numeric water quality criterion thereby allowing the proposed de minimis approach to apply to all regulated pollutants. Unless IDEM provides a de minimis option for all proposed new or increased discharges, the regulated community will be required to prepare and IDEM will be required to review antidegradation demonstrations even if the increased discharge will not significantly impact the waterbody just because the regulated pollutant at issue does not have a numeric water quality criterion. (IPL, FA)

Response: Though statute requires some inclusion of a de minimis (but de minimis is undefined by statute), IDEM does not believe the statute necessitates a provision for a de minimis for everything. For example, IDEM does not believe it is appropriate to allow de minimis loadings of BCCs. Additionally, 327 IAC 2-6 (a) establishes minimum surface water quality conditions: (1) All surface waters at all times and at all places, including waters within the mixing zone, shall meet the minimum conditions of being free from substances, materials, floating debris, oil, or scum attributable to municipal, industrial, agricultural, and other land use practices, or other discharges that do any of the following:

(A) Will settle to form putrescent or otherwise objectionable deposits.

(B) Are in amounts sufficient to be unsightly or deleterious.

(C) Produce:

(i) color;

(ii) visible oil sheen;

(iii) odor; or

(iv) other conditions;

in such degree as to create a nuisance.

These minimum conditions prohibit certain loadings and a de minimis cannot be established for loadings that are not allowed.

Nitrogen and Phosphorus

Comment: Specific mentions of nitrogen and phosphorus as regulated pollutants in 327 IAC 2-1.3-2(44)(A)(ii)(BB) are concerning since they would already be covered in the narrative category listed in subitem (AA). It would seem unnecessary to single out certain pollutants. It is understood that nitrogen and phosphorus could be subject to antidegradation review; however, focusing attention on nitrogen and phosphorus with rule language when numerous comments have been made alleging that IDEM was essentially ignoring those nutrients does nothing but set unreasonable expectations. The antidegradation review will be limited with respect to nitrogen and phosphorus and the actions which can be required under the antidegradation rule are limited when addressing nonpoint sources of pollution. (IP-FB)

Response: Attention has already been focused by U.S. EPA on phosphorus and nitrogen; thus, IDEM believes it is important to be clear that the phosphorus and nitrogen are regulated pollutants.

Industrial Pretreatment Permitting

Comment: CWA authority, as the authority implementing the industrial pretreatment permitting (IPP) program in Indianapolis, and the practical mechanics behind the implementation of section 5(c) of the proposed rule seem to be unclear as they relate to IPP permit holders and

the antidegradation analysis that should occur. The applicability of the proposed rule is confusing for POTWs with an IPP as well as for the IPP permit holders. IDEM needs to provide guidance to IPP program authorities in the implementation of these provisions prior to final adoption of the rule. (CEG)

Response: An IPP should be able to provide an analysis of the pollution prevention alternatives and techniques they considered and employed to ensure the discharge they send to a POTW is necessary.

Water Quality Improvement Projects

Comment: Water quality improvement projects language in the proposed rule needs clarification. Whereby it is appreciated that the proposed rule provides for a maximum dollar figure as a component to the guidance, it is necessary to provide further clarification to assist permittees as to how IDEM will make a determination regarding the final cost of the required project. (NIF)

Response: IDEM anticipates that if methods are available to offset the degradation to an OSRW for less than the $500,000 statutory cap, then those methods will be deployed rather than the payment of the fee.

Comment: The concept of a water quality improvement project as stated in section 7 of the proposed rule is contrary to the clear intent of IC 13-18-3-2(k) and (l). The legislative language (and the legislative committee discussions leading up to enactment of the statute) was premised on the concept that the water quality improvement project or fund was established as the basis for satisfying the requirements of an antidegradation demonstration for a significant lowering of water quality subject to an implied understanding that the lowering of water quality was "necessary." This is evidenced by the wording in IC 13-18-3-2(k)(2) that the rule procedures will "allow for increases and additions in pollutant loadings … if (A) there will be an overall improvement in water quality." It is acknowledged that the legislation also references that (i) the procedures will be designed to "prevent degradation" (IC 13-18-3-2(k)(1)) and (ii) in addition to providing for an overall improvement in water quality, the proposal for increases and additions in pollutant loadings also is to satisfy the applicable antidegradation standards of 327 IAC 2-1 and 2-1.5. Notwithstanding these references to elements of antidegradation procedure, the fact remains that the understanding, as well as the clear intent of the statutory language, has always been that the performance or funding of a water quality improvement project will be the primary basis of gaining approval for the increased loading by a discharger to an OSRW. However, the proposed rule is not consistent with this understanding. As written, the proposed section 7 requires the water quality improvement project be performed or funded in addition to an antidegradation demonstration. However, Section 5 does not clearly implement the understanding referenced above and could leave a discharger proposing a water improvement project facing an obligation to prepare a full antidegradation demonstration including the elements of subsections 5(f) and (g). While the provision of subsection 5(b)(5) of the proposed rule appears to address the situation in which a discharger actually implements a water improvement project in the watershed of the OSRW, it would be preferable for the proposed language to actually reference the water improvement project concept of IC 13-18-3-2(k) and (l) as an example. More problematically, proposed subsection 5(b)(5) does not encompass the option for a discharger under IC 13-18-3-2(l) to pay the water improvement fee in lieu of actually performing a project. Under this latter scenario, the net decrease in loading of the regulated pollutant to the OSRW watershed will not necessarily occur simultaneously with the increased loading by the discharger. To correct this oversight, Section 5(b) should be revised to expressly provide that a project involving payment of a water improvement fee pursuant to IC 13-18-3-2(l) is included within the scope of subsection 5(b). With these revisions, a proposed increase in loading to an OSRW involving a water improvement project implementation or fee

payment will satisfy the antidegradation demonstration requirements with submittal of the basic information of Section 5(a) and the "necessary" information of Section 5(c). (IchC, ISEG)

Response: IDEM does not agree. IDEM interprets the statute as requiring an antidegradation demonstration for loadings that cause a significant lowering of water quality. Additionally, for loadings to an OSRW, an offset to the degradation must be provided. These offsets are not the same as the pollution trading activities outlined in the section 5 of the proposed rule. It is important that a social and economic analysis be provided to comply with the antidegradation standards outlined in section 3 of the proposed rule.

Comment: As written, the Indiana-only (no federal requirement for a water quality improvement project) antidegradation requirement of section 7 for an overall improvement project (or $500,000) applies to any such temporary discharge exempt from federal antidegradation. That is inconsistent with the federal philosophy of allowing such projects to proceed in federal jurisdictional waters without the full-scale burden of an extensive demonstration and lengthy legal conflicts. It also requires IDEM to develop the concept of a "temporary" water quality improvement project. The exemption for an OSRW from the antidegradation demonstration requirement under section 4(a) only provides an exemption from section 5 requirements, but, for an Indiana rule, it also must be an exemption from section 7 requirements. (IEI)

Response: IDEM agrees and the proposed rule is revised to expand the section 4 exemptions to include exemptions from the water quality improvement project or payment to the OSRW improvement fund requirements.

Public Outreach

Comment: Public outreach and education are critical to permit issuance. To provide the citizens of Indiana the assurance of quality outreach and education, public venues whereby antidegradation is discussed should be managed in a consistent manner by IDEM. (NIF)

Response: The proposed rule, in section 6, provides opportunity for public comment on the antidegradation demonstrations submitted to IDEM.

Fiscal Impact

Comment: IDEM's fiscal impact analysis (FIA) does not comply with IC 13-14-9-5(a)(2)(C) because it does not: (1) consider the annual economic impact on all regulated persons beginning with the first 12 month period after the rule is fully implemented; and (2) consider the effect that compliance with the proposed rule will have on "the state and all persons regulated by the proposed rule." In the FIA, IDEM relied upon an inadequate amount of fiscal information and, therefore, did not provide a true picture of the costs associated with antidgradation demonstations. Nor did IDEM adequately address the costs of the rule to small businesses or the costs associated with changing water treatment additives at a facility. (IWQC-IMA)

Response: IDEM prepared the fiscal impact analysis according to Indiana law and it was reviewed and approved by the Office of Management and Budget (OMBA). IDEM solicited fiscal impact information from stakeholders and considered the information received before preparing the FIA. Additionally, IDEM provided all information received from stakeholders as part of the rule's FIA submitted for review by OMBA.

Comment: IDEM's FIA is based on permit applications that have been submitted but the applicability of the proposed rule is beyond activities that trigger a new or modified permit limit; therefore, the FIA regarding the number of demonstrations that will need to be prepared each year is not supported by the information presented. IDEM has not provided any information regarding the amount and specificity of information necessary to constitute an adequate antidegradation demonstration; therefore, IDEM cannot claim that a full demonstration will require only 16 hours of work at a cost of $100 per hour, numbers based on Iowa's

antidegradation program though there is no statement whether IDEM's antidegradation requirements are the same as Iowa's. IDEM's 16 hour estimate at a cost of $100 per hour is unrealistically low and certainly has not been supported by IDEM. (IPL)

Response: IDEM prepared the fiscal impact analysis according to Indiana law and it was reviewed and approved by OMBA. IDEM solicited fiscal impact information from stakeholders and considered the information received before preparing the FIA. Additionally, IDEM provided all information received from stakeholders as part of the rule's FIA submitted for review by OMBA.

Comment: The FIA needs to be based on a forecast of 2012. Moreover, even the unsupported costs that IDEM calculates ($4,000 to $16,000 per individual small business) would be especially onerous on small businesses in today's economic climate. (IWQC-IMA)

Response: It is not possible to forecast for a future year without considering past years of conduct of permit application submissions. Using 2009, the year following the nationwide economic downturn, is more realistic than using 2008 when the economy had been strong up to that year, given that the subsequent years after 2009 have not shown great economic upturn unlike 2008 at the end of the peak of the economic better times.

Comment: IDEM's FIA repeatedly refers to and relies on numbers generated by Iowa when it performed its fiscal impact analysis of its antidegradation rulemaking in 2008. Relying on data from another state in 2008 does not comply with IC 4-22-2-28. IDEM's FIA needs to concern itself with costs to Hoosiers in the future not on costs to Iowans in 2008. (IWQC-IMA)

Response: IDEM believes that the use of data from other states is, in fact, permissible under IC 4-22-2-28 if the data is relevant. The statute says nothing about data being limited to data from Indiana only.

Comment: IDEM's fiscal analysis did not include assessment of antidegradation reviews of regular pollution prevention analyses as likely will be required under 327 IAC 5(c)(2)(C) for the many POTWs and their indirect dischargers having to analyze their small increases of trace substances that will trigger an antidegradation demonstration. (IEI)

Response: IDEM does not believe the proposed rule will require many POTWs and their indirect dischargers having to analyze their small increases of trace substances. IDEM solicited fiscal impact information from stakeholders and considered the information received before preparing the FIA and this concern was not raised.